PREDICTING WELL-BEING AND HEALTH BEHAVIORS AMONG ADOLESCENTS: IMPACT OF PARENTING, TEMPERAMENT, AND ATTACHMENT

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ABSTRACT

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Adolescence is an era of life that individuals grow up rapidly and experience changes. This rapid growth also leads teenagers to experience flows in their physical and psychological well-being and social relationships with their parents. The current study aimed to investigate the interplay of perceived positive parenting and negative affectivity regarding parental attachment security and the predictive roles of perceived parenting and parental attachment security for well-being and health-promoting behaviors among adolescents, cross-sectionally and longitudinally. The results showed the bidirectional positive associations between perceived positive parenting and attachment security cross-sectionally and longitudinally for mothers and fathers. It was also revealed that negative affectivity did not moderate the association between perceived positive parenting and attachment security. Furthermore, the predictive roles of positive parenting and attachment security were documented for well-being and health-promoting behaviors, with mother and father variables, respectively. The findings, limitations, contributions, and implications of the study were discussed concerning existing literature.

Keywords: Well-being, health behaviors, attachment security, perceived positive parenting, negative affectivity.

ÖZ

ALGILANAN EBEVEYNLİK, MİZAÇ VE EBEVEYNLERE BAĞLANMANIN ERGENLERDE İYİ-OLUŞ VE SAĞLIK DAVRANIŞLARI ÜZERİNE ETKİSİ

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Ergenlik, bireylerin hızla büyüdüğü ve değişimlerin yaşandığı bir gelişim dönemidir. Bu hızlı büyüme aynı zamanda gençlerin fiziksel ve psikolojik iyilik hallerinde ve ebeveynleriyle sosyal ilişkilerinde iniş çıkışlar yaşamalarına da yol açmaktadır. Mevcut çalışma, algılanan olumlu ebeveynlik ve ergenlerin olumsuz duygulanımı arasındaki etkileşimin ebeveynlere güvenli bağlanma üzerindeki rolünü ve algılanan ebeveynlik ve ebeveynlere güvenli bağlanmanın ergenlerde iyi-oluş ve sağlık davranışları için yordayıcı rollerini kesitsel ve boylamsal olarak araştırmayı amaçlamıştır. Sonuçlar, anneler ve babalar için kesitsel ve boylamsal olarak algılanan olumlu ebeveynlik ve bağlanma güvenliği arasındaki çift yönlü pozitif ilişkileri göstermiştir. Ergenlerin olumsuz duygulanım özelliklerinin algılanan olumlu ebeveynlik ve bağlanma güvenliği ilişkisi için düzenleyici role sahip olmadığı da bulunan sonuçlar arasındadır. Ayrıca, olumlu ebeveynlik ve bağlanma güvenliğinin iyi-oluş ve sağlık davranışları için yordayıcı rolleri, sırasıyla anne ve baba değişkenleriyle sınanmıştır. Çalışmanın bulguları, sınırlılıkları, katkıları ve çıkarımları mevcut literatüre göre tartışılmıştır.

Anahtar Kelimeler: İyi-oluş, sağlık davranışları, bağlanma güvenliği, algılanan ebeveynlik, olumsuz duygulanım.

Dedicated to Middle East Technical University, *My Wonderland*.

Where I lost and found myself, again and again…

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CHAPTER 1

INTRODUCTION

Starting from the early years of life, individuals strive to learn how to maintain their lives on their own and what is good for them. Through the life span, adolescence is an era of life that individuals grow up rapidly and experience changes in mental and physical health (Steinberg, 2004). While balancing their own autonomy needs and their parents' wishes, adolescents learn more about maintaining and promoting their mental and physical health. Scientific research exploring the precursors of both mental and physical health indicated that strong social ties play a significant role in predicting both mental and physical health, not only cross-sectionally but also longitudinally (Barger, Donoho, & Wayment, 2009; Cohen, 2004; Umberson & Karan Montez, 2010). Effects of social ties on mental and physical health come into play starting from childhood and endure its effect throughout life span for better or worse outcomes. Relationships with parents hold particular importance among the social relationships since their impacts are endured through life-span (Arredondo et al., 2006; Perry, Story, & Lytle, 1997).

Within the scope of the current study, well-being was considered an indicator for mental health; while health-promoting behaviors were operationalized as a representative of physical health precursors. From a broader perspective, the current study aimed to explore three main research questions: *i*) how are perceived parenting and parental attachment security associated longitudinally among adolescents? *ii*) Does negative affectivity moderate the perceived parenting and parental attachment security association? *iii*) Do perceived parenting and parental attachment security have predictive roles for adolescents' well-being and health-promoting behaviors? In the following sections, literature review regarding these research questions are presented.

1.1. Parenting – attachment association in adolescence

1.1.1. Attachment in adolescence

Attachment was defined as a relationship building pattern based on early experiences with parents (Bowlby, 1969, 1982). Starting from early childhood, the form and requirements of secure attachment evolve. Since adolescents start to spend more time with their peers and a romantic partner, Allen (2008) discussed that these people could also act as attachment figures for adolescents. Studies exploring the attachment hierarchies of adolescents showed that parents were ranked over the peers, siblings, and romantic partners (Bayraktar, Sayıl & Kumru, 2009; Rosenthal and Kobak, 2010; Seibert and Kerns, 2009). Based on these findings, the current study focused on attachment security to mothers and fathers instead of other close relationships figures.

Along with the other changes during adolescence, changes in attachment security toward parents are not exception (Ruhl, Dolan, & Buhrmester, 2015). Although attachment is accepted to be built in infancy and continues to manifest similar characteristics through the life span (Bowlby, 1969, 1982), literature findings were inconclusive, whether parental attachment changes through the life span, especially during adolescence (Ruhl et al., 2015). It was suggested that attachment during adolescence changes form since the evolving teenagers' need for physical closure and security decreases. Yet, the need for emotional closeness and feelings of security remain (Buist, Deković, Meeus, & van Aken, 2002). The literature is inconclusive whether attachment security is stable (Allen, McElhaney, Kuperminc, & Jodl, 2004; Buist, Reitz, & Dekovic, 2008) or changes through time (Ammaniti, van IJzendoorn, Speranza, & Tambelli, 2000; Hamilton, 2000). Following these different views, the first aim of the current study was to test the adolescents' continuity of attachment security toward mothers and fathers. It was expected that the attachment security would stay stable and show continuity.

Among many other positive developmental outcomes, attachment security to parents was proposed as an essential precursor of mental and physical

health for adolescents. Adolescents, who experience secure attachment toward their parents also reported higher levels of well-being, and psychological adjustment (Amato, 1994; Wilkinson, 2004; Yang, Wang, Li, Teng, & Ren, 2008), higher engagement in health-promoting and protecting behaviors (Pietromonaco, DeVito, Ge, & Lembke, 2015), and higher self-rated health (Kim & Choi, 2018). In line with these, one of the aims of the current study was to test the predictive role of attachment security to the well-being and health-promoting behaviors of adolescents

1.1.2. Perceived Parenting as a Predictor of Parental Attachment Security during Adolescence

When we look at the predictors of parental attachment security, positive and supportive relations with parents were prominent in the literature (Buist, Dekovic, Meeus, & van Aken, 2002; Allen et al., 2003). Although some previous studies used positive parenting and attachment as equals in adolescence, a meta-analysis of Koehn and Kerns (2018) showed that the strength of the relationships among these constructs is not enough to use them interchangeably. In other words, parenting and attachment are distinct constructs. Yet still, behaviors of primary caregivers are thought to constitute the base for the development of (in)secure attachment. Keys to the continuation of attachment security in adolescence were suggested as higher autonomy support, age-appropriate monitoring, sensitivity, responsiveness, and warmth from parents (Karavasilis, Doyle, & Markiewicz, 2003; Koehn & Kerns, 2018). These characteristics are also named positive parenting practices in the literature and foster adaptive developmental outcomes (Bornstein, 2005). Following these findings, in the current study, perceived positive parenting was included as a predicting variable and operationalized as a combination of parental warmth, responsiveness, and autonomy support from mothers and fathers.

Warmth

Parents who are high on warmth are the ones who answer the needs of their children with politeness, positive manners, and adequacy (Amato, 1990). Parental warmth could be considered a combination of connectedness and balance of power among parents and adolescents (Weichold, Büttig & Silbereisen, 2008). Higher levels of parental warmth led to harmony, while lack of warmth brought conflict in parent-adolescent relationships (Darling & Steinberg, 1993). Parental warmth was shown to influence and be influenced by the changes in parent-adolescent relationships (Sijtsema, Oldehinkel, Veenstra, Verhulst, & Ormel, 2014). Consistency in parental warmth was associated with attachment security, while lack or lower levels of parental warmth were considered a precursor of insecure attachment (Koehn & Kerns, 2018).

Responsivenes

Parental responsiveness includes "caregiving, warmth, positive engagement, acceptance, supportiveness, willingness to serve as a secure base/comfort figure, and support of emotions" (Koehn & Kerns. 2018, p. 387). It was underlined that the association between responsiveness and attachment security was more robust for mothers compared to fathers. This difference might stem from the differences between mothers' and fathers' roles in their children's lives and the time they spend with them. Grossmann and colleagues (2008) speculated that rather than showing warmth to their children, fathers take greater responsibility for their children's environmental stimulation and exploration development through play and being a playmate (Grossmann, Grossmann, Kindler, & Zimmermann, 2008). Increasing autonomy needs during adolescence could assign fathers' parenting behaviors, especially autonomy support and encouragement, an essential role in attachment security toward fathers.

Autonomy support

Parental autonomy support is a quality marker of parent – child relationships. Adolescents perceive their parents high in autonomy support; when the parents listen to their children's ideas, when parents support their children's autonomous behaviors and explorations, when parents let the children make decisions for themselves, and when parents give children rules, they explained the ground of these decisions to their children (Mageau et al., 2015). The role of parental autonomy support during adolescence is comparable to parental comfort and exploration support during infancy for maintaining secure attachment with parents (Becker-Stoll, Fremmer-Bombik, Wartner, Zimmermann, & Grossmann, 2008). For young children, who heavily depend on their parents for survival, sensitivity and responsiveness were shown to be the best precursors of maternal attachment security (De Wolff & Van IJzendoorn, 1997), on the other hand, these constructs were weakly associated with paternal attachment (Lucassen et al., 2011). For older children, who can take care of themselves, precursors of attachment security toward both parents were not only responsiveness (Kerns, Tomich, Aspelmeier, & Contreras, 2000) but also autonomy support (Becker-Stoll et al., 2008).

Warmth, responsiveness and autonomy support shape positive parenting for adolescents. In the absence of positive parenting, attachment security might deteriorate. Koehn & Kern (2018) underlined the scarcity of longitudinal studies exploring the parenting – attachment association for adolescence. It was accepted that both parenting and attachment security change through time, and longitudinal studies were considered to be crucial to understand the link between parenting and attachment. Thus, current study aimed to contribute to the literature by investigating the perceived parenting and parental attachment security with a longitudinal design among adolescents.

1.1.3. Negative Affectivity as a Moderator for Parenting – Attachment Association

Belsky (1984) claimed that temperament of the child, as an individual characteristic, may change how parenting aspects would show their impact on children's attachment security. Since temperamental characteristics of children and adolescents explain the individual difference in interpreting the impact of, and reactions to environmental factors (Thomas & Chess, 1977), temperamental characteristics were thought to play an explanatory role for the parenting – attachment security association (Chotai, Jonasson, Hägglöf, & Adolfsson, 2005). Among the other temperamental characteristics, negative emotionality/ affectivity could act as a moderator between parenting and attachment association (Koehn and Kerns, 2018; Mangelsdorf & Frosch, 1999). In the literature, different researchers and different measures used to test negative emotionality and negative affectivity in close meaning or interchangeably (Rothbart & Bates, 1998). In the following sections of the current study, for the sake of consistency, the term *negative affectivity* is used.

As a temperamental characteristics, negative affectivity was described as disposition to experience negative emotion stronger and more often, and to give stronger reactions when exposed to negative emotions (Eisenberg & Fabes, 2006). Rothbart and colleagues (Rothbart & Bates, 1998; Rothbart, Ahadi, & Evans, 2000) differentiated negative affectivity from positive affectivity and emphasized the strength of fear, shyness, frustration, sadness, irritability and discomfort for the description and manifest of negative affectivity. Negative affectivity among children and adolescents is comparable to adult neuroticism, whereas positive affectivity was comparable to extraversion of Big Five Personality Dimensions (Rothbart, Ahadi, & Evans, 2000). It was speculated that when negative emotionality is manifested, it is common to observe outburst of anger, fear, conduct and behavior problems. On the other hand, when negative emotionality is suppressed, individuals are likely to feel higher levels of guilt, tension, sadness, tenderness, moodiness and fragility, and suppression of these emotions can lead to anxiety and depression (Zuckerman, 2012).

Negative affectivity was shown to be associated with perceived parenting and attachment security cross-sectionally and longitudinally. In their meta-analysis on parenting and negative affectivity from infancy to preschool years, Paulussen-Hoogeboom et al. (2007) showed that negative affectivity was associated with more restrictive control, less supportiveness, and less inductive control. For older children and adolescents, negative affectivity was associated positively with negative parenting characteristics such as punishment, parental distress, nonsupportive reactions (Eisenberg et al., 1999), rejection, inconsistent discipline (Lengua, 2006), psychological and behavioral control (Laukkanen et al. 2014). In the literature, there is scarcity of studies reporting the association of negative affectivity and the positive parenting characteristics among adolescents.

IJzendoorn and Bakermans-Kranenburg (2012) argued that, parenting as an environmental factor and temperament as an individual factor not only affet each other, but also affect the development of attachment security. For younger children, negative affectivity was considered to elicit negative parenting behaviors, which in turn lead the children to construct insecure attachment toward parents (Kochanska, 2001). Murphy et al. (2015) reported a reverse association between attachment security and negative affectivity among adolescents, and speculated that this reverse link stemmed from adolescents' frequent experience of parental rejection and inconsistent behaviors. A recent study showed that early adolescents who experienced higher levels of emotional reactivity and lower levels of maternal sensivity were more likely interpret mothers' behaviors as ambigious, which was related to insecure attachment (De Winter, Waters, Braet, & Bosmans, 2018). Although the literature is rich for the research on the bivariate associations between attachment and temperament, and parenting and temperament; there is need for studies investigating the interplay of positive parenting, negative affectivity and attachment security for middle childhood and adolescence, to better understand the complex developemental processes during adolescence (Kobak et al., 2017). Literature suggests that negative affect, parenting and attachment security toward parents can impact, and can be impacted from each other. The interplay of these three constructs may also play predictive role for other developmental outcomes. Among many other

developmental outcomes, the current study focused on well-being and health-promoting behaviors of adolescents as outcome variables. In the following sections, how parenting and attachment security are linked to adolescents' well-being, and health-promoting behaviors are explained.

1.2. Well-being in Adolescence

Definition

Majority of research exploring the mental health focused on absence of illness, but focusing on well-being can enhance our understanding of human development and functioning (Ryff & Singer, 1996). Deci and Ryan (2008) defined well-being, as "*optimal psychological experience and functioning*" (p. 1). The term well-being captured great interest of developmental psychologists, yet it is hard to employ a unifying definition of well-being (Pollard & Leer, 2003). In relation to developmental outcomes, the term well-being was used in five different domains, which were, physical, psychological, cognitive, social, and economic. In those domains, the terms quality of life, life satisfaction, wellness and well-being are used interchangeably. Ben-Arieh (2010) reported that majority of well-being research focusing on children and adolescents reflected the views of adults, mostly parents and teachers. In their review, Diener et al. (2008) reported that well-being studies with children and adolescents used mostly indirect measures and indicators, such as lack of problem behaviors, or academic success, rather than using self-reports. Parents and teachers reported children's and adolescents' well-being by evaluating them on physical health, mental health, self-regulation, social competence, and cognitive competence (Newland, 2014). Diener et al. (2008) also remarked that the research on children's and adolescents' well-being used mainly parent or teacher reports, and underlined the need for well-being research using self-report measures with children and adolescents. Thus, the current study also aimed to support the literature by using self-report measures for the evaluation of well-being. Adolescence is considered to be a critical developmental stage for expanding and

sustaining well-being (Ross et al., 2020). Many psychological disorders, which are detrimental to mental health and well-being, such as depression, are thought to occur during adolescence and show continuity to ongoing years (Raj, Senjam, & Singh, 2013). Well-being is considered to be negatively associated with mental health problems. Therefore, it is crucial to study the predictors of well-being during adolescence. Sen (2003) considered well-being as an interactive construct, which impacts and is impacted by individual structures, and social interactions. Positive social interactions in adolescence were found to be positively related to adult well-being (Olsson et al., 2013). One of the essential interactions in life are the ones we build with our parents (Bornstein, 2005), thus, it is vital to explore the predictive roles of perceived positive parenting and attachment security toward parents for well-being among adolescents (Kobak et al., 2017). In the current study, as two complementary components of well-being (Diener, Sapyta & Suh, 1998), psychological well-being and subjective well-being were taken as outcome variables.

1.2.1. Psychological Well-being

Definition

According to Ryff and Singer (1996), psychological well-being is an umbrella term which integrates self-acceptance, positive relationships with others, autonomy, environmental mastery, purpose in life, and personal growth. When combined, positive functioning in these six domains of psychological well-being (PWB) indicates optimal psychological funtioning of individuals. Higher scores in these six domains are associated with better neuroendocrine regulation, lower cardiovascular risk, and better immune functioning (Ryff & Keyes, 1995; Ryff et al., 2006). Studying psychological well-being during adolescence holds importance because of its positive impact on favorable developmental outcomes, such as academic achievement, hopefulness, self-esteem, lower levels of problem behaviors, lower levels of conflict with parents and positive relations with peers, and lower levels of health risk behaviors (Shek,

1997; 1998). Adolescents with higher levels of PWB reported higher resilience, self-satisfaction (Sagone & De Caroli, 2014), cooperation skills, and lower levels of impulsivity and disruptiveness (Holopainen et al., 2012).

General predictors

When the beneficial impact of PWB in adolescence is taken into account, what predicts psychological well-being in an era of rapid developmental changes captured the interest of scholars. It is possible to consider predictors of PWM among adolescents as bifold: objective and subjective predictors. Among objective factors, it is possible to name age, gender, free time activities. Age they got older, adolescents reported lower levels of PWB (Viejo et al., 2018). Compared to boys, girls reported lower levels of PWB (Viejo et al., 2018). How do teens spend their time is also a significant predictor of PWB. Adolescents who had higher screen times (laptop, cell phone, television, etc) reported lower levels of PWB (Twenge & Campbell, 2018); on the other hand, adolescents who engaged in frequent leisure activities, such as sport and art (Trainor et al., 2010), reported higher PWB.

Subjective predictors of the PWB among adolescents can be also considered under two pillars: Intrapersonal and interpersonal predictors. Among intrapersonal factors, self-esteem, positive and negative affect (Garcia & Moradi, 2013), emotional intelligence (Guerra-Bustamante et al., 2019), coping styles, and personality (Trainor et al., 2010) are significantly associated with PWB among adolescents. Self esteem, positive affect and emotional intelligence, problem-focused coping were positively associated with PWB among adolescents. On the other, negative affect and emotion focused coping were negatively associated with PWB of adolescents. Among interpersonal factors, posiitve social relations also play significant role in explaining variances in adolescents' PWB scores. Positive peer relationships (Balluerka et al., 2016) and high peer attachment security (Armsden, & Greenberg, 1987), as well as positive contacts with teachers (Alivernini et al., 2019) are significantly associated with higher levels of psychological well-being among adolescents.

Perceived positive parenting and psychological well-being among adolescents

Among all the social relationships, how adolescents evaluate their relationship with their parents is crucial in predicting PWB. Negative parenting characteristics such as, psychological control (Nucci et al., 2005) and parental alienation (Ben-Ami & Baker, 2012) in adolescence were negatively associated with adolescents' and young adults' PWB scores cross-sectionally and longitudinally. On the other hand, parental involvement positively impacted adolescents' PWB (Cripps & Zyromski, 2009). Components of positive parenting, such as maternal and paternal warmth and support, were shown to have a constructive role in adolescents' psychological well-being (Newland, 2014). Loving parental care in adolescence predicted adulthood PWB (Borelli et al., 2019). Following these findings, the current study aimed to investigate the predictive role of positive parenting on adolescents' PWB. It was expected that perceived maternal and paternal positive parenting would be positively associated with adolescents' PWB scores cross-sectionally and longitudinally.

Parental attachment security and psychological well-being among adolescents

Starting from early developmental stages, attachment security is indicative of positive mental representations and internal working models of the self, and as well as others (Bowlby, 1969, 1982). These positive mental representations are shown to be stable over time, and significantly related to psychological well-being during childhood, adolescence (Geiger & Schelbe, 2021), and adulthood (Marrero-Quevedo, Blanco-Hernández, & Hernández-Cabrera, 2019). Attachment security measured during infancy was predictive of better mental health during adolescence, which goes hand in hand with psychological well-being (Carlson, 1998). Parental attachment security, both measured in infancy (Carlson, 1998), and measured in childhood and adolescence (Geiger & Schelbe, 2021) provides adolescents a comfort zone to

boost personal growth, which leads to higher levels of psychological well-being. Adolescents reporting higher parental attachment security were more likely to accept themselves and assert their autonomy, have positive relationships with other people and their environment, and more likely to have a purpose in life (Obeldobel & Kerns, 2021). Secure attachment with parents during adolescence is associted with higher autonomy, better social relationships, and problem solving skills (Moretti & Peled, 2004), which are indicators of psychological well-being. Amato (1994) showed that attachment security toward both mothers and fathers had distinct positive impact for PWB of adolescents and young adults. In a recent study, in addition to its direct link with adolescents' PWB scores, parental attachment security also mediated the mindful parenting practices – PWB link (Medeiros et al., 2016). Further, in their cross-sectional study, Cai et al. (2013) found that parental attachment security was a mediatior between positive parenting assets, and psychological well-being indicators of Chinese adolescents.

1.2.2. Subjective Well-being

Definition and importance

Subjective well-being (SWB) was defined as *"as 'a person's cognitive and affective evaluations of his or her life'* (Diener, Oishi, & Lucas, 2002, p.187). Although earlier research on SWB focused on adult population, recent research showed that SWB during adolescence is as important as during adulthood (Eryılmaz, 2012). Yet, compared to established research of SWB in adulthood, investigation of SWB in adolescence is a developing research area (Proctor et al., 2017).

Proctor (2014) suggested that subjective well-being in adolescence could be an index of mental health, since it predicts a wide range of positive outcomes in behavioral, social, and cognitive development, as well as health and school domains (Huebner, Suldo, & Gilman, 2006). Adolescents with higher levels of SWB are more likely to have higher grades in school, higher scores in

interpersonal functioning and psychological health (Gilman & Huebner, 2006). On the other hand, youth with lower levels of SWB are more likely to report greater engagement in problem behaviors, such as smoking, drug usage, violent behaviors, as well as lower academic achievement, and satisfaction in social relationships (Paxton, Valois, Huebner, & Drane, 2006). Research on adolescents' SWB holds importance not only for adolescence, but also for later developmental stages, while levels of SWB measured in adolescence was shown to impact self-reported health, academic and work performance, as well as social relationships in emerging adulthood and later developmental stages of life (Kansky, Allen & Diener, 2016). Individuals with higher SWB during adolescence, reported better partner and friend attachment, lower conflict in social relationships, and better adjustment to life in adulthood years. Thus, understanding predictors of, and short- and long-term changes in adolescents' SWB can shed light on the healthy human development, as well as future implications in basic and applied research in developmental psychology.

General predictors

SWB in adolescence was considered as an interactive concept, which predicts and predicted by developmental outcomes (Li, Huebner, & Tian, 2022). From a broad perspective, Proctor et al. (2017) classified predictors of SWB in adolescence as objective and subjective indicators. Objective indicators covered demographical information, education and income levels of the parents, parental marriage status, housing conditions of the youth, and neighborhood qualities such as access to health, schooling, and recreational facilities (Guo, 2019; Kwan, 2010; Landsford, 2018; Proctor et al., 2017). As demographical information, age and gender were mainly used as predictors. Age was shown to be reversely related to subjective well-being, while girls reported lower levels of SWB compared to boys (Li & Yin, 2019; Newland et al., 2015; Rask, Åstedt-Kurki, & Laippala, 2002). In earlier developmental stages, girls and boys reported similar SWB scores. With the start of puberty, girls were more likely to report lower levels of SWB. Hankin and Abramson (2001) explained this declaim among girls

by the increase of anxiety and depression. During the later developmental stages through life-span, females reported lower levels of SWB, compared to males (Pinquart & Sörensen, 2001). Both biological differences among female and male bodies, and societal differences loaded to the gender roles are effective in explaining the differences of SWB among females and males (Meisenberg & Woodley, 2015).

Although explained a great proportion of variance, these objective indicators fail to capture the subjective evaluation of one's life. On the other hand, subjective indicators of SWB tap on the cognitive evaluation of the individual for the intra-, and interpersonal aspects of one's life (Huebner, Suldo, & Gilman, 2006; Seligman & Csikszentmihalyi, 2000). Since investigation of SWB centers individual's evaluation of their physical, as well as immediate social surroundings, studying subjective indicators of SWB holds great importance (Diener, 2000). It is possible to consider subjective indicators of adolescents' SWB as bifold: intrapersonal and interpersonal factors. Among the intrapersonal factors, inner processes, their evaluations of, and attitudes toward social environment, such as, self-concept clarity, hope (Xiang et al., 2022), and character strengths (Liu & Wang, 2021) were found to be positively associated with SWB among adolescents. How adolescents evaluate their body and health also contributed to the variance of SWB among adolescents (Rask, Astedt-Kurki, Marja-Terttu, & Pekka, 2002).

Among the interpersonal factors, social relationships are the core predictors of the adolescents' SWB. With the start of adolescence, individuals spend majority of their time in schools, and how adolescents perceive their school life plays an important role in predicting their SWB. Different components of school climate have differing roles in predicting SWB among adolescents. Positive components, such as school attachment, sense of belonging to the school, and school satisfaction were associated positively with adolescents' SWB; on the other hand, bullying victimization was negatively linked to adolescents' SWB (Oberle et al., 2011; Varela et al., 2019; Varela et al., 2021). Yet, the degree of the predictive power of peer relationships for the SWB of adolescents were shown to be culture dependent (Schwarz et al., 2012).

In other words, in the cultural settings, where family importance is higher, the predictive role of peer relationships for the adolescent SWB was weaker.

Perceived positive parenting and subjective well-being among adolescents

Although adolescents spend more time at school and with peers, and peer relationships and other social relations are important, among the interpersonal predictors of adolescents' SWB, the main predictor remained the quality of perceived parenting (Liu & Wang, 2021; Rask et al., 2002). When adolescents perceive their relationship with their parents safe and constructive, they are more likely to report higher levels of SWB (Li & Yin, 2019; Rask, Astedt-Kurki, Marja-Terttu, & Pekka, 2002). Involvement of mothers and fathers in adolescents' lives has unique and equally significant and positive roles in predicting SWB (Yap & Baharudin, 2016). Positive parenting behaviors related to emotional support, autonomy granting and supervision are associated with greater SWB among early, middle, and late adolescents (Suldo & Huebner, 2004). In addition, parental autonomy support is positively associated with SWB among adolescents, whereas psychological control is reported to detoriate the SWB (Li, Yao, Chen, & Liu, 2020). Higher parental emotional warmth is directly and via character strengths positively associated with SWB among adolescents (Liu & Wang, 2021). In a study conducted with adolescents from Turkey, Kocayörük (2012) found that having autonomy supporting and warm relationship with a mother and a father were both directly, and indirectly via basic psychological needs, associated with subjective well-being among adolescents, which was measured as the positive and negative affect. These findings indicate the importance of perception of positive parenting among adolescents for higher level of SWB. However, since majority of the previous research had cross-sectional design, these findings also fail to capture the changes of perceived positive parenting – SWB associations through time among adolescents.

Parental attachment security and subjective well-being among adolescents

Starting from infancy, attachment security toward parents play a significant role in predicting SWB. Adolescence is not an exception. Adolescents who have higher attachment security toward parents are likely to report higher levels of SWB, as well (Landsford, 2018). Among all other developmental precursors in adolescence, parental attachment security plays a major role in predicting the changes in subjective well-being (Jiang, Huebner, & Hills, 2013). Guo (2019) reported a positive and direct association between maternal attachment security and subjective well-being. Parental attachment security are found to be directly and indirectly, via character strengths, associated with SWB among adolescents (Liu & Wang, 2021). Secure attachment to parents are thought to boost exploration via increased autonomy support among adolescents, which, in turn, lead to higher levels of SWB (McElhaney, Allen, Stephenson, & Hare, 2009).

Compared to peer attachment, perceived parental attachment quality among adolescents is a prime factor in explaining subjective evaluations of positive functioning, such as coping with stress and self-esteem (Greenberg, Siegel, & Leitch, 1983). Greenberg et al. (1983) operationalized SWB as the combination of coping with stress and self-esteem, which is criticized by Diener et al. (2008), that there is a need for research with self-report measurements of SWB from children and adolescents. Ma & Huebner (2008) measured SWB as adolescent self-report and reached similar findings; that is to say, when parent and peer attachment security were regressed on SWB of adolescents, parental attachment security explained a bigger portion of variance (Ma & Huebner, 2008). Yet, both research used cross-sectional designs. To better understand the interplay of the changes in parental attachment security and SWB in adolescence; and how the changes in these two constructs are associated with each other, there is a need for longitudinal research. The current study aimed to fill this gap by employing a longitudinal design.

1.3. Health Promoting Behaviors in Adolescence

Definition and importance

"*Health is the dynamic balance of physical, mental, social, and existential well-being in adapting to conditions of life and the environment*" (Krahn et al., 2021, p. 1). To maintain a healthy life, individuals need to promote both mental and physical health. World Health Organization defined mental and physical health promotion as "*the process of enabling people to increase control over, and to improve their health*" (WHO, 2022b). Health promotion is a general concern, not only for individuals with chronic or acute health problems but also for the individuals who are free of diseases and syndromes yet who would like to prevent diseases and maintain their wellness (Jahnke, 2001). Health promotion is essential not only for individuals but also for societies and governments. When individuals maintain healthy lives, they are less likely to use health services, which reduces the cost to the government (Krahn et al., 2021). In line with these, the behaviors which promote both mental and physical health were considered to hold significance (Spear & Kulbok, 2004; Walker & Hill-Polerecky, 1996; Walker, Sechrist, & Pender, 1987).

Alonzo (1993) defined health "promoting" behaviors (HPB) as voluntary acts that lessen or avoid injury, disease, disability, and harm; and enhance physical and mental health. During adolescence, youth experience a transition from parent-managed health promotion toward self-initiated and self-managed health promotion (Srof & Velsor-Friedrich, 2006). Adolescents are expected to take more responsibility to maintain their health status and think of their behaviors' consequences on their mental and physical well-being. Health-promoting behaviors adopted during adolescence are thought to not only affect immediate adolescence health but also persist during adulthood (Hallal et al., 2006; Raj, Senjam, & Singh, 2013). Health-promoting or risking behaviors acquired during adolescence are thought to be decisive for morbidity and mortality not only during adolescence but also in the further developmental stages (Viner & Macfarlane, 2005). Health-promoting behaviors adapted during

adolescence were thought to be beneficial to fight with future chronic diseases (Allensworht, 2014).

General predictors

When the importance of HPB during adolescence is taken into account, it also becomes essential to identify the possible predictors, which can be grouped into main themes: Objective and subjective predictors. Objective predictors were age, gender, family structure, ethnicity, chronic health problems, and neighborhood factors (Rew, Arheart, Thompson, & Johnson, 2013; Spear & Kulbok, 2001). For instance, it is much more difficult to establish and maintain HPB for adolescents coming from poor families and neighborhoods, compared to their peers coming from affluent families and neighborhoods (Allensworth, 2014). Subjective predictors can be divided into intrapersonal and interpersonal predictors. Among intrapersonal predictors, it is possible to name personality, motivation, goal-orientedness, knowledge, and attitudes of the adolescents regarding health-promoting behaviors (Duncan et al., 2007; Rew et al., 2013).

Social relationships constitute the interpersonal predictors for adolescents' health-promoting behaviors. Social relationships are thought to affect the health status and health behaviors of individuals (Cohen, 2004). During adolescence, peers and parents constituted the core of social relationships; thus, they were thought to play a crucial role in predicting adolescents' health-promoting behaviors. In a qualitative study, it was reported that, adolescents would like to feel themselves competent about their own health promotion. Yet, they lacked the supportive parents who would give them behavioral control boundaries, and peers who would present them exemplar health behaviors (Lindqvist, Kostenius, & Gard, 2012). Starting from early adolescence, peers and peer groups become dominant resource for the acquiring of new behaviors and HPB are not exceptions. During adolescence, peer relationships can be both barriers and promoters for the acquiring and maintanence of HPB (Aceves-Martins, Aleman-Diaz, Giralt, & Solà, 2019). Peer groups have the power to decide which behavior "cool" or "uncool". Some

health risk behaviors, such as smoking and alcohol consumption, can be accepted cool by the peers, yet those behaviors and promoters of those behaviors constitute barriers for health promotion among adolescents. Adolescents were more likely to engage in HPB when there is a role model in their peer groups, who engaged in constructive behaviors, such as participation in physical activity, and health literacy activities (Viner & Macfarlane, 2005). Facilities, such as sport activity areas, that enable adolescents to engage in HPB were more likely to be associated with lower destructive peer relationships, which reduced destructive peer impact for the maintaince of HPBs (Duncan et al., 2007). The role of peer relationships in shaping the health promotion during adolescence is widely accepted, yet this subject is beyond the aims of the current study; thus, it was not included as the predictors of HPB.

Although peer relationships gain dominance, relationships with parents continue to hold importance in adolescence for many developmental areas, including HPB. Adolescents who had highly satisfying relationships with their parents were less likely to engage in behaviors that may put their health under risk, and more like to report health-promoting behaviors, such as physical activity (Carter, McGee, Taylor, & Williams, 2007). Family routines and warmer parent-adolescent relationships during early adolescence were associated with lower engagement of risky health behaviors, such as excessive alcohol consumption and unprotected sexual activity during early adulthood (Abar, Clark, & Koban, 2017). It was suggested that parental autonomy support can be an important facilitator for teenagers to take responsibility for their own health, and engage in health promoting behaviors (Spear & Kulbok, 2004). Teenagers who reported higher satisfaction with relationships with adults, specifically parents, reported higher engagement in health promoting behaviors (Leon, Carmona, & Garcia, 2010). Contrary to positive effects of warm and supportive relations with parents; when parents show higher degrees of controlling behaviors and less degrees of responsiveness, poorer health outcomes occurred among teenagers (Gottman & Katz, 1989; Repetti, Taylor, & Seeman, 2002).

All the above mentioned predictors showed varying strength in predicting different health-promoting behaviors. Mostly studied health promoting and risk

behaviors during adolescence can be summarized as; eating behaviors, self-hygiene, physical activity, sleep habits, alcohol, and drug usage, sexual behaviors, and seat belt usage (Chen, Wang, Yang, & Liou, 2004; Spear & Kulbok, 2001; Walker & Hill-Polerecky, 1996). The majority of the studies did not adopted a holistic approach, and focused on only one of these listed behaviors (Spear & Kulbok, 2001). Instead of adopting promotive and constructive side of health behaviors, most of the research focused on health risk behaviors, such as smoking, risky sexual behaviors, and alcohol consumption (Carter et al., 2007). Although studies existed, the literature lacked inclusive and longitudinal research on how parent-adolescent relationships' qualities were associated with adolescent health-promoting behaviors (Davids, Roman, & Leach, 2017). To answer these needs, the current study aimed to investigate the interplay of parent-adolescent relationship and health promoting behaviors, longitudinally. Following the literature (Chen et al, 2004; Walker & Hill-Polerecky, 1996), physical activity, health responsibility, diet, and stress management were included as components of health-promoting behaviors in the current study. In the following sections, these health-promoting behaviors and their possible associations with general predictors and parent-adolescent relationships were explained regarding adolescent development.

1.3.1. Physical Activity

Definition and importance

World Health Organization (2020a) defined physical activity as "*any bodily movement produced by skeletal muscles that requires energy expenditure*". Physical activities can include, but are not limited to, walking, cycling, swimming, yoga, dancing, gardening, and climbing the stairways. Physical activities can be organized actions or free movements. Any movements either during leisure time, or during work and school hours could be accepted as physical activity. Physical activities were shown to have countless mental and physical health benefits. To begin with, physical activity during adolescence was

associated with lower risk of unexpected death during adolescence and adulthood (Boreham et al., 2002). The higher the adolescents engaged in physical activities, the less likely they suffered from cardiovascular disease during adolescence and adulthood (Hallal et al., 2006). It was shown that increased physical activity among low income adolescents was associated with increased levels of self-esteem, and decreased levels of depression (Crews, Lochbaum, & Landers, 2004). Physical activity was thought to boost not only physical health outcomes, but also academic achievement. Increased physical activity was associated with increased scores of general academic achievement among Australian adolescents (Owen, Parker, Astell-Burt, & Lonsdale, 2018). The pattern of the association was linear for boys; on the other hand, the association showed quadratic change for the girls. Physical activity among male adolescents was associated with better bone density, and this association was not observed among female adolescents. These results were attributed to the lower physical activity participation levels among female adolescents (Neville et al., 2002; WHO, 2022a). Among Turkish adolescents, normal weight status was positive associated with higher physical activity participation (Ercan, Dallar, Önen, & Engiz, 2012), on the other hand, a reverse link was reported between age of the Turkish adolescents and their physical activity participation (Kin-İşler, Aşçı, Altıntaş, & Güven-Karahan, 2009).

WHO (2020a) recommended for children and adolescents between the ages of 5 -17 at least 60 minutes of moderate physical activity daily. In addition, it was advised for this age group to increase heartbeats and muscle strength at least three times per week or higher levels of physical activity. WHO (2018) reported that most children and adolescents did not meet the recommendations for daily and weekly physical activities. Physical inactivity was shown to have unfavorable consequences for not only the health conditions of individuals but also the health cost burden on societies. WHO (2018) attributed approximately 3 % of all health cost burdens to the physical inactivity of individuals. In addition, physical activities adopted during adolescence were shown to persist through adulthood (Hallal et al., 2006). It was shown that individuals who engaged in

physical activity during adolescence were likelier to continue their active lifestyles and less likely to suffer health problems.

General predictors

When the favorable impact of physical activity is considered, it becomes crucial to investigate the predictors of physical activity among adolescents, which can be grouped into two main themes: Objective and subjective predictors. Among the objective predictors, it is possible to list age, gender, ethnic background, parental education, and income. Age and gender of the adolescents were most commonly studied as objective predictors (Spear & Kulbok, 2001). Although physical activities were shown to have crucial benefits for maintaining a healthy lifestyle with the start of adolescence, individuals engaged in lower levels of physical activity (Owen et al., 2018). Compared to boys, among girls, engagement in physical activity showed a steeper decline (Rew et al., 2013). As another objective predictor, parental education level was both a direct and indirect predictor of adolescents' physical activity (Krick & Sobal, 1990). Directly, parents with higher education levels were more likely to engage in physical activity themselves and constituted role models for the adolescent children. Indirectly, parents with higher education levels were more likely to have higher income, which, in turn, led them to offer their children leisure activities, such as physical activity. Parents with lower incomes were less likely to offer activity opportunities to their children and to talk about activity opportunities (WHO, 2022).

Subjective predictors can be considered under two main themes: intrapersonal and interpersonal predictors. An important intrapersonal predictor of physical activity among adolescents was self-confidence. There is a bidirectional association between self-confidence and physical activity among adolescents (Strauss, Rodzilsky, Burack, & Colin, 2001). Adolescents with higher self-confidence are more likely to be satisfied with themselves and their bodies, and also more likely to engage in physical activity. It was also observed, that adolescents who engaged in physical activity, were more likely to report

higher levels of self-confidence. Other intrapersonal predictors of physical activity among adolescents could be listed as adolescents' feelings, ideas, motivations, values, self-efficacy and goals about physical acitivities (Issner, Mucka, & Barnett, 2017; Welch, Ellis, Green, & Ferrer, 2019). Since these characteristics were beyond the scope of the current study, they were not included.

Social interactions with parents, siblings, and peers were thought to constitute the interpersonal predictors of PA among adolescents. Interpersonal relationships were shown to have both positive and negative impact on current and intended future PA of adolescents, directly and indirectly (Bunke, Apitzsch, & Bäckström, 2013; Silva, Lott, Mota, & Welk, 2014). Positive interpersonal experiences were shown to increase adolescents' PA directly (Grenville-Cleave, Brady, & Kavanagh, 2017) and indirectly via increased self-efficacy and joy from the sports (Silva, Lott, Mota, & Welk, 2014). On the other hand, destructive relationships could lead decreased participation in PA for adolescents (Bunke et al., 2013). For instance, siblings can both boost or decrease the PA participation among adolescents, by providing support or by giving discouraging comments (Longmuir, Corey, & McCrindle, 2021). As the start of the adolescence, peer relationships gain importance for many developmental outcomes, and physical activity is not an exception. Peer relationships and physical activity were shown to affect each other positively. Adolescents, who engaged in higher levels of physical activity were more likely to feel higher peer acceptance (Daniels & Leaper, 2006; Lee, Shin & Smith, 2019). The association from peer acceptance to physical activity was also significant longitudinally (Lee et al., 2019). Since it was beyond the cover of the current study, peer relationships were not included as a predictor in the current study.

Perceived positive parenting and physical activity

Adolescents with stronger emotional connections and supportive relationships with their parents were more likely to engage in physical activities (Carter, McGee, Taylor, & Williams, 2007; Scarapicchia et al., 2017). Having

close and warm relationships with parents, directly and indirectly, impacts adolescents' physical activity engagement (Strauss, Rodzilsky, Burack, & Colin, 2001). Directly, a positive association between perceived parental warmth and participation in physical activities was reported. Indirectly, close and warm parents provided their children higher levels of confidence, which, in turn, was positively associated with motivation to engage in physical activities. Parental support was also indirectly associated with the physical activity participation of adolescents. When adolescents perceived their parents as supportive, they were also more likely to feel physically fit, which predicted higher physical activity participation (De la Torre-Cruz, Suárez-Manzano, López-Serrano, & Ruiz-Ariza, 2020). Compared to positive assets of perceived parenting, parental control and restrictiveness were considered negative blocks in healthy parent-adolescent communication (Dishion & McMahon, 1998). When communication was blocked, it would be less likely for adolescents to receive and process the suggestion of parents regarding health-promoting behaviors and to test their limits. It could be possible for adolescents that the higher the control they perceive from their parents, the higher adolescents would engage in risky health behaviors.

Parental attachment security and physical activity

Parental attachment security was shown to be an impactful asset in the human development, especially for the exploration of one's environment, one's own strengths and limits (Bowlby, 1969, 1982). In an early study, adolescent girls and boys commonly reported that, parental attachment security and physical activity involvement were essential ingredients of their strengths (Williams & McGee, 1991). Previous studies investigated how these two crucial strengths of adolescents were interconnected. In a qualitative study, adolescents reported that their attachment security toward parents was an important milestone in their participation in physical activity. Their attachment security also brought them positive social relationship experiences in sports settings (Lisinskiene, Guetterman, & Sukys, 2018). Attachment security was found to be both directly

and indirectly associated with increased levels of physical activity among teenagers. Parental attachment security among adolescents was indirectly associated with physical activity participation via basic need satisfaction (Lai & Carr, 2020). In other words, parental attachment security was predictive of adolescents' basic needs, which, in turn was associated with increased levels of PA. When attachment security toward boths parents were employed separately, attachment security toward fathers was directly linked to adolescents' PA, while attachment security toward mothers had an indirect role in predicting adolescents' physical activity, via physical self-perception (Li, Bunke, & Psouni, 2016). On the contrary of these positive associations, the findings of Lisinskiene and Juskeliene (2019) indicated low correlations among physical activity engagement of adolescents and their attachment security toward both mothers and fathers, respectively.

It was also discussed that, attachment security toward mother and attachment security toward father might serve distinctively in different developmental outcomes (Grossmann et al., 2008). Mothers were considered to take the roles of suppliers of soothing and responsiveness, while fathers were thought to expand further the environmental exploration of their kids by providing more opportunities for sensitive and challenging play (Grossmann et al., 2002). Since each adolescent has unique systems of self and family, as well as unique and separate relationships with mothers and fathers, Lisinskiene et al. (2018) suggested that future studies should investigate the roles of maternal and paternal attachment security in predicting adolescents' physical activity participation separately. Following these mixed findings and suggestions, the current study aimed to investigate the roles of attachment security toward mothers and fathers, separately with a longitudinal design in predicting adolescents' PA.

All in all, although physical activity offer invaluable assets to individual and societal welfare, physical activities of adolescents did not reach to recommended levels (WHO, 2022). Investigating precursors of physical activity during adolescence could offer promising tools to increase adolescents' physical activity engagements. Understanding the mechanism behind this decline could

offer solutions to help adolescents to increase their physical activity levels; thus, it holds great importance to investigate the predictors of physical activity among adolescents, cross-sectionally and longitudinally. Thus, current study aimed to investigate the predictive roles of perceived positive parenting and parental attachment security simultaneously with a longitudinal design.

1.3.2. Health Responsibility

Definition and importance

Health responsibility was defined as an umbrella term, which covers individuals' motivations, desires, and choices to promote a healthy life style and to increase their potential for physical and mental health (Pender, Murdaugh, & Parsons, 2011). The early interpretation of health responsibility emphasized that health status of individuals depended on their acceptance of the responsibility of their own health (Walker, Sechrist, & Pender, 1987). This responsibility covered attention for one's own health, seeking of opportunities for health education, and seeking of medical advice and help. Start of adolescence brings individuals the need of autonomy increases (Steinberg, 2001), which, in turn, brings more responsibilities, including health responsibility. Starting from adolescence, instead of parents, individuals pay more attention to their bodily changes, look for to options to meet their physical and psychological needs. Finding the appropriate healthy option for their developmental and maintenances of their physical and psychological wellness is the core of adolescents' health responsibility (Ayres & Pontes, 2018), yet, compared to other health promoting behaviors, health responsibility scores of adolescents were reported to be the lowest (Chu-Ko et al., 2021).

General predictors

Since health responsibility is an important element of health promotion, it is essential to identify the possible predictors, which can be grouped into main

themes: Objective and subjective predictors. Among the objective predictors, it is possible to list weight, age, gender, number of comorbidities, and parental marital status and education level. Compared to girls, boys scored lower on health responsibility (Chen Shiao, & Gau, 2007). Health responsibility was positively associated with age and health problems (Houle et al., 2017). As individuals get older, they are more likely to have more health problems, as well as more health responsibility. It was also reported that there was a difference between normal weight and over-weighted adolescence in terms of health responsibility, favoring the normal weight adolescents (Peng et al., 2022). Parental marital status and education level were also reported have a significant role. Adolescents coming from single parent families reported lower scores of health responsibility compared to their peers coming from two parent families (Chen et al., 2007). Adolescents whose parents had higher educational levels were more likely to score on health responsibility (Chen et al., 2007)

Like in the previous chapters, subjective predictors can be grouped into two pillars: Intrapersonal and interpersonal predictors. Among intrapersonal predictors, it is possible to name other health promoting behaviors, depression, neighborhood perceptions, and health literacy Health responsibility was positively associated with other health promoting behaviors, and perceptions about the neighborhood (Ayres & Pontes, 2018). The more adolescents engaged in other health promoting behaviors, the higher health responsibility scores they received. In addition, adolescents were more likely to get higher scores of health responsibility, when they had positive perceptions of their neighborhood. In addition, health responsibility was negatively associated with depression scores among late adolescents (Tang, Feng, & Lin, 2021). Adolescents' health responsibility was thought to build upon health literacy; thus, Nash et al. reported that health literacy and health responsibility were positively associated among adolescents (Nash, Patterson, Flittner, Elmer, & Osborne, 2021). On the other hand, in an early study, Chang (2011) reported no significant link between health literacy and health responsibility among adolescents in Taiwan.

Among interpersonal predictors, social interactions at schools, with peers, and with family hold importance for the health responsibility. Schools were

considered to provide optimal conditions for gaining health responsibility among adolescents (Nash et al., 2021). Yet, deficits in teachers' knowledge and courage to give students basic health information, as well as lacking interest and motivation of parents and students for the participation in health literacy related activities were reported to be the barriers of schools' success in increasing adolescents' health responsibility (Nash et al., 2021). Houle et al. (2017) reported that positive peer social support was important in predicting health responsibility among males. Peers could be positive role models and companions for the initiation and continuation of health responsibility engagement. On the other hand, Ayres and Pontes (2018) reported a nonsignificant association among perceived social support from friends and health responsibility.

Perceived positive parenting, parental attachment security, and health responsibility

To the best of researcher's knowledge, there are no studies specifically exploring the role of perceived parenting or parental attachment in predicting health responsibility among adolescents. Rew et al. (2013) reported that, parental monitoring and responsiveness were positively associated with adolescents' health practice awareness. Research on parental attachment security and health locus of control showed that adolescents with higher parental attachment security were more likely to report better health status and were more willing to take responsibility for the maintenance of their health in the future (Maynard, 2001). Bekaroğlu and Bozo (2017) investigated the role of romantic attachment styles in predicting general health-promoting behaviors but not report a specific finding regarding health responsibility.

Although studies exist, the research on health responsibility and its related constructs in adolescence are limited. Many studies on the health promotive behaviors among adolescents has not paid enough attention to health responsibility and to this date has not reported results regarding this vital health promotion construct (Ayres & Pontes, 2018). There is a scarcity of longitudinal research investigating health responsibility among adolescents.

1.3.3. Healthy Diet

Definition and importance during Adolescence

WHO (2016/2022) reported that approximately 18% of children and adolescents were obese worldwide, these prevalence reach to 30 % for developing countries. In Turkey, approximately 22.5 % of children were classified as overweight or obese (Turkish Ministry of Health, 2016). The main reason for obesity was found to be unhealthy eating habits and malnutrition (WHO 2016/2022). In the current study, healthy diet was operationalized as the course of eating habits, which balance the intake of vegetables, fruits, appropriate fats, vitamins, and minerals, as well as, elimination of excessive consumption of fa(s)t food and soft drinks. WHO (2020b) considered a healthy diet an important milestone in protecting one's health and avoiding from acute and chronic diseases, and labeled unhealthy eating as a leading factor to world's general health problems. Paying attention one's diet hold great importance starting from childhood and continues to be decisive of life-long health condition of individuals.

Since adolescents spend more time outside of family and they use their autonomy to decide what and when to eat, gaining and maintaining a healthy diet was considered to be especially important during adolescence (Doggui, Ward, Johnson, & Bélanger, 2021). In an early qualitative study, it was reported that adolescents had a good grasp of what healthy eating meant, yet, despite the higher levels of knowledge for healthy eating habits, adolescents were less likely to maintain balanced and healthy eating habits (Croll, Neumark-Sztainer, & Story, 2001). Adolescents considered lack of time, lower concern to consume healthy food, and lower availability of healthy food choices in educational facilities as barriers to keep on healthy diet (Croll et al., 2001). Individuals, who gain healthy dieting styles during adolescence, were more likely to keep their healthy eating habits during young adulthood (Larson, Neumark-Sztainer, Hannan, & Story, 2007). Among adolescents, reduced sugar intake was associated with lower risks of obesity, diabetes, heart diseases, whereas reduced

salt intake was linked to reduced risk of hypertension and heart diseases both during adolescence and future stages of life span (WHO, 2020b).

General predictors

When the importance of healthy diet during adolescence is taken into account, it also becomes essential to identify the possible predictors, which can be grouped into main themes: Objective and subjective predictors. Gender and age of the adolescents were among the objective factors. It was reported that, compared to boys, girls were more likely to follow healthy diets and less likely to consume fast food (Tambalis, Panagiotakos, Psarra, & Sidossis, 2018). Adolescents' age was also a positive predictor of fast food consumption, the older they got, the more frequently they consumed fast food, which was associated with lower intake of vegetables and fruits (Tambalis et al., 2018). Parental education level also plays a role in adolescents' healthy eating habits. Children of parents with lower educational levels were more likely to suffer from malnutrition, which ended up either in lower- or over-weight problems among adolescents (Dallacker, Hertwig, Peters, & Mata, 2016). One of the important predictors of adolescents' healthy diet was the frequency of family meals. Adolescents who had higher number of family meals were more likely to report higher number of breakfasts, higher intake of fruits and vegetables, and lower levels of soft drink consumption not only in adolescence, but also during young adulthood (Larson, Neumark-Sztainer, Hannan, & Story, 2007). Having breakfast was also an objective predictor of lower consumption of fast food and soft drinks (Tambalis, Panagiotakos, Psarra, & Sidossis, 2018; Doggui, Ward, Johnson, & Bélanger, 2021).

Healthy eating behaviors of adolescents are also under the impact of subjective predictors, which can be grouped under intrapersonal and interpersonal factors. Among intrapersonal factors, feelings, ideas, motivations, values, self-efficacy, goals, perceived behavioral control, reward and punishment sensitivity, as well as effortful control, were studied concerning healthy eating behaviors of adolescents (Chan & Tsang, 2011; Issner, Mucka, & Barnett, 2017;

Matton, Goossens, Vervaet, & Braet, 2017; Welch et al., 2019). Since these objective and subjective predictors were beyond the scope of the current study, they were not included.

Among the interpersonal factors, social relationships were shown to have significant roles for adolescents' healthy eating habits, since eating is not only the take of material in our bodies, but also a ritual within the social contexts (Herman, Polivy, & Roth, 2003). Most of the time, eating activities take place with the companionship of families and friends, and people were reported to eat more in social contexts, compared to the times they eat alone. In a qualitative study, Chinese adolescents reported that they were more likely to consume unhealthy food during parties, and social events (Chan, Prendergast, Grønhøj, & Bech-Larsen, 2009). A systematic review showed that peers and siblings were likely to negatively impact children's and adolescents' healthy eating habits (Ragelienė & Grønhøj, 2020). Adolescents were more likely to consume food containing high fat and sugar and drink more soft drinks, during the times they spent with their friends. Compared to peers, the impact of siblings was lower for the consumption of unhealthy foods.

Perceived positive parenting and healthy diet

Among the social relationships, parents are the most important actors in adolescents' (un)healthy eating behaviors (Pedersen, Grønhøj, & Thøgersen, 2015). Parents' views on food, parents' food selection, parents' support or discouragement of family meals were shown to be effective in children's and adolescents' (un)healthy eating behaviors (Anderson, Gooze, Lemeshow, & Whitaker, 2012; Beck et al., 2019; Dallacker, Hertwig, & Mata, 2018). Darling and Steinberg (1993) argued that perceptions of positive relationships with parents help adolescents to proceed parents' socialization practices, including socialization of healthy eating habits (Lessard, Greenberger, & Chen, 2010). To fulfill the increasing autonomy needs of adolescents, it was suggested that parental demandingness and responsiveness can guide adolescents to adopt and maintain healthy eating habits (Balantekin et al., 2020). When adolescents

perceived their parents as warm, they were more likely to accept healthy eating messages and directives of their parents (Lessard et al., 2010). In a cross sectional study, it was reported that, adolescents who reported high levels of affection, responsiveness and behavioral control of mothers and fathers, were less likely to report unhealthy eating habits and less likely to be obese or over weighted (Haines et al., 2016). On the other hand, adolescents, whose mothers were less sensitive during their childhood were more likely to gain unhealthy eating habits and experience weight related problems (Anderson et al., 2012). Positive parenting characteristics, such as behavioral control and guidance were negatively associated with emotional eating, and soft drink consumption, on the other hand, coercive parenting practices were positively associated with sweet food consumption among Belgian adolescents (Philips, Sioen, Michels, Sleddens, & De Henauw, 2014). Although abovementioned studies showed important associations between positive parenting and healthy eating of adolescents, they had limitations. They reported either only maternal parenting practices (Anderson et al., 2012) or reported parents' own evaluations of parenting practices, without separating mothers and fathers (Philips et al., 2014). Since the adolescents' perceptions of parenting can be different than parents' own perception of their own parenting practices, in the current study, adolescents' perceptions of positive parenting for mothers and fathers were evaluated separately.

Parental attachment security and healthy diet

In addition to perceived positive parenting, parental attachment security was also found to be impactful in adolescents' healthy eating practices cross-sectionally and retrospectively (Faber & Dube, 2015), as well as directly and indirectly. There was a positive association between adolescents' parental attachment insecurity and unhealthy eating choices. Adults, who reported parental attachment insecurity retrospectively, were more likely to suffer from obesity (Faber & Dube, 2015). Attachment security was shown to affect physical developmental outcomes through emotion regulation. Lower maternal

attachment security was associated with disrupted emotional regulation skills, which, in turn affects children's and adolescents' healthy eating habits (Goossens, Van Malderen, Van Durme, & Braet, 2016; Waters et al., 2010). Attachment insecurity toward mothers and fathers were associated with pathological eating attitudes among adolescents (Goossens, Van Durme, Naeye, Verbeken, & Bosmans, 2019). Adolescents who were higher on attachment insecurity were more likely to report concerns regarding their eating habits, weight and body shape. Adolescents, who got lower parental attachment security during early childhood were more likely to be obese during their adolescence (Anderson, Gooze, Lemeshow, & Whitaker, 2012). In addition, compared to attachment security, maternal sensitivity was a stronger predictor of adolescents' obesity problems (Anderson, Gooze, Lemeshow, & Whitaker, 2012). Yet, in the study of Anderson et al. (2012) both attachment security and parental sensitivity were measured only from mothers, during in toddlerhood. To assure the generalizability of these findings, in the current study, attachment security and parental sensitivity were measured during adolescence longitudinally and from both parents, respectively. It was hypothesized that, attachment security would be positively associated with adolescents' healthy diet scores.

1.3.4. Stress Management

Definition and importance of stress management during adolescence

Selye (1974), who was one of the pioneers in stress research, defined stress as the "nonspecific response of the living organism to any stimuli, for example, effort, focused attention, pain, illness, failure, joy, success, that cause changes" (cited in Stauder, 2020, p. 2011). Following this definition, not only sad but also happy events and situations can lead to stress. Folkman and Lazarus (1984) defined psychological stress as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (p.19), and emphasized the destructive side of stress. Stress, which increases with age, was

shown to be detrimental to psychological and physical health; thus, stress management holds importance throughout the life span (Cohen, 2004).

Successful management of stress tapped on the regulations of stress-related emotions such as anxiety, fear, and anger, constructive thinking abilities, control and re-direction of arousals and behaviors, and practicing the manageable elements in the environment (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). In the literature, it was emphasized that stress management and coping with stress tapped on similar processes (Compas et al., 2001; Ong, Linden, & Young, 2004). American Psychological Association defined stress management as "*the use of specific techniques, strategies, or programs—such as relaxation training, anticipation of stress reactions, and breathing techniques—for dealing with stress-inducing situations and the state of being stressed*" (APA, N.D.). On the other hand, coping with stress was defined as "*the use of cognitive and behavioral strategies to manage the demands of a situation when these are appraised as taxing or exceeding one's resources or to reduce the negative emotions and conflict caused by stress*" (APA, N.D.). Following these two definitions, it is possible to say that stress management and coping with stress involve similar behavioral and cognitive techniques to reduce the detrimental effect of stress on one's psychological and physical health. In the current study, following Walker and colleagues, stress management was operationalized as the sum of behavioral and cognitive relaxation techniques, such as breathing exercises and daily planning of school and family tasks (Walker, Sechrist, & Pender, 1987).

Stress management was vital to overcoming daily hassles (Cohen, 2004). From early childhood, gaining habits, attitudes, and behaviors to strengthen stress management helps healthy development throughout the lifespan (Compas et al., 2001). Adolescents experience rapid changes in physical, cognitive, and social developmental outcomes, which can be a great source of stress; thus, managing this stress stemming from the developmental process of adolescence constitutes a challenge for the evolving individuals (Steinberg, 2001). Stress management holds importance not only for self-control but also for building and carrying out significant social relationships. Daily stress affects adolescents'

psychological and physiological health (Lippold, Davis, McHale, Orfeu, B., & Almeida, 2016a). Adolescents with higher levels of daily stress reported higher levels of negative affectivity and cortisol levels, affecting the body's stress management mechanism in the long run. Adolescents who were not adequately managing stress were more likely to develop problem behaviors, such as smoking and risky sexual behaviors, as well as eating and mood disorders (Garcia, 2010; Siqueira, Diab, Bodian, & Rolnitzky, 2000). Adolescents who failed in stress management were more likely to experience depression and anxiety symptoms (Seiffge-Krenke, 2000). Improved stress management skills led adolescents to have higher scores of self-efficacy (Hampel, Meier, & Kümmel, 2008).

General Predictors

When the importance of stress management during adolescence is taken into account, it also becomes essential to identify the possible predictors, which can be grouped into main themes: Objective and subjective predictors. Among the objective predictors, it is possible to list age, gender, and health comorbidities. There was a positive association among age and stress management of adolescents (Seiffge-Krenke, 2000). As adolescents got older, they were more likely to use a broader range of stress management practices. Gender differences for daily stressful events were reported in a daily dairy study, that is to say, compared to boys girls reported higher number of stressful events (Lippold, Davis, McHale, Orfeu, B., & Almeida, 2016a). When compared, it was revealed that boys and girls used different stress management strategies (Hampel, 2007). Girls reported more social support and emotional focused stress management tactics, while boys reported to have higher degrees of problem focused tactics. In addition, number of health comorbidities and stress management was negatively associated among males (Houle et al., 2017). Family factors such as parental health and marital status were impactful on adolescents' stress management. Adolescents whose parents were divorced, or whose parents had chronic health problems used stress management techniques

more often (Skinner & Zimmer-Gembeck, 2007). Last but not least, family socioeconomic status was directly and indirectly, via parental responsiveness, decisive of adolescents' stress management capacities (Evans, Boxhill, & Pinkava, 2008). Adolescents coming from low SES families were in disadvantageous positions.

Like in the previous outcome sections, it is possible to consider subjective predictors of stress management as bifold: Intrapersonal and interpersonal factors. One of the intrapersonal factors of stress management was religiosity. Adolescents, who reported a higher degree of religiosity, also reported higher scores of stress management (Rew, Arheart, Thompson, & Johnson, 2013). Temperament and self-regulation were also considered important precursors of stress management among children and adolescents. Adolescents with higher self-regulation scores were more likely to manage stressful situations (Compas et al., 2001). As temperamental characters, stress reactivity and effortful control were decisive in adolescents' stress management capabilities (Derryberry, Reed, & Pilkenton-Taylor, 2003). Since intrapersonal factors were beyond the scope of the current study, they were not included.

Interpersonal processes play a critical role in the development of stress management among children and adolescents. Social connectedness was an essential predictor of stress management among adolescents. Adolescents with higher degrees of social connectedness were more likely to get higher stress management scores (Rew et al., 2013). Adolescents who used social support as means of stress management were more likely to have reduced stress, on the other hand, adolescents who preferred social isolation were more likely to fail to manage their stress (Zimmer-Gembeck & Skinner, 2011). Positive social relationships constitute the basement of stress management among adolescents. Constructive relationships with family members and teachers boosted adolescents' stress management skills (Zimmer-Gembeck, & Locke, 2007). In times of stress, majority of adolescents counted on mostly parents and friends (Howard & Medway, 2004). Positive family and peer relationships were positively associated with stress management scores among males (Houle et al., 2017). Although teacher and peer relationships constitute a great base for the

stress management development among adolescents, the current study focused on the roles of perceived parenting and parental attachment security in predicting stress management among adolescents, longitudinally.

Perceived positive parenting and stress management

As base of positive parenting, perceived warmth and support from mothers and fathers were cross-sectionally and longitudinally associated with better stress management among adolescents (Gervais, & Jose, 2020). Parental monitoring, as an asset of positive parenting practices, was positively linked to adolescents' stress management scores (Rew et al., 2013). Adolescents with less positive parent-child relationships were more likely to control themselves in stressful situations, which in turn were associated with higher levels of physical aggression (Lakhdir, Rozi, Peerwani, & Nathwan, 2020). This association was stronger for boys, who also reported less positive relationships with parents. Parental warmth was shown be a buffer against daily stress among adolescents. On stressful days, adolescents who perceived their mothers higher in parental warmth, were less likely to report negative affect (Lippold, Davis, McHale, Orfeu, B., & Almeida, 2016a). Daily positive experiences with both mothers and fathers were protective factors against the stressful events, which in turn increased stress management capabilities of adolescents (Lippold, Davis, McHale, Almeida, & King, 2016b). Children, whose parents scored higher on warmth and responsiveness were more likely to manage stressful situation (Watson et al., 2014). In addition, parental responsiveness acted as a buffer mechanism for the detrimental effect of stress among low-income families (Asok, Bernard, Roth, Rosen, & Dozier, 2013).

Parental attachment security and stress management

Starting from early childhood, at times of stress, individuals with higher attachment security felt the emotional availability of their parents, and they exercised to express their needs and emotions (Cassidy, 1994; Waters et al.,

2010). The expression of needs and emotions acted as a tool for stress management. On the other hand, individuals with lower levels of parental attachment security were prone to suppress their needs and emotions (Cassidy, 1994). Unexpressed emotions might lower the capacity to manage stress because of the preoccupation with unsolved issues. Attachment security and constructive stress management were positively associated among adolescents (Howard & Medway, 2004). Parental attachment security in adolescence provides a common ground for adolescents' autonomy and relatedness needs. When these needs were met, adolescents regulated their internal states more effectively and were better at managing stressful situations (Becker-Stoll, Fremmer-Bombik, Wartner, Zimmermann, & Grossmann, 2008). In everyday life, parental attachment security impact the stress management capabilities of adolescents through regulation of emotions and physiological states (Spangler & Zimmermann, 1999). In conflicting situations, adolescents who reported lower levels of attachment security were more likely to report emotional and physiological dysregulation problems, which, in turn, was associated with poorer stress management (Decarli, Pierrehumbert, Schulz, Schaan, & Vögele, 2022). Low parental attachment security also showed intergenerational detrimental impact for adolescents' stress management. Mothers with lower parental attachment security toward their own mothers were more likely to receive lower emotion regulation scores, which, in turn, was positively associated with their adolescent children's stress management (Jones, Brett, Ehrlich, Lejuez, & Cassidy, 2014).

1.4. Current Study

Abovementioned literature emphasized the importance of adolescence as a developmental era, that, individuals experience rapid physical and psychological changes, which, in turn, affect their mental and physical health (Steinberg, 2001). Chronic mental or physical health problems acquired during adolescence can persist through life (Viner & Macfarlane, 2005). Developing a perspective of health-promotion, acquiring related behavioral reportoire, and carrying out these habits through not only adolescence, but also life-span are

important for individual and societal well-being (Krahn et al., 2021; WHO, 2022b). Thus, research on adolescents' well-being and health-promoting behaviors carry enourmous importance for adolescents, not only during adolescence but also through life-span (Hallal et al., 2006; Raj, Senjam, & Singh, 2013).

Identifying the predictors of well-being and health-promoting behaviors can enable researchers to better understand the existing phenomena, can give important clues to enrich the applied developmental science. The abovementioned literature review showed that predictors of these two constructs can be objective, such as age and gender, and subjective, such as self-efficacy, and personality. Among subjective predictors, it is possible to make distinction among intrapersonal, and interpersonal factors, which had rich and informative nature. Interpersonal factors were shown to wire in health-promoting behaviors and mental states (Cohen, 2004; Rew et al., 2013; Skinner & Zimmer-Gembeck, 2007). Like in the earlier developmental phases, also during adolescence, relationships with parents continue to hold importance for well-being (Huebner, Suldo, & Gilman, 2006; Seligman & Csikszentmihalyi, 2000), and health-promoting behaviors (Rew et al., 2013). The literature on the adolescents' perceived positive parenting and parental attachment security showed similar positive patterns in predicting well-being and health-promoting behaviors. That is to say, the better qualities of adolescents' relationship with parents yielded better scores of well-being and health-promoting behaviors. Yet, to the best knowledge of the researcher, there is scarcity of studies, investigating roles of perceived positive parenting and parental attachment security simultaneously in predicting well-being and health promoting behaviors among adolescents. Thus, the current study focused on the predictive roles of perceived positive parenting, and parental attachment security for the domains of well-being and health-promoting behaviors among adolescents.

For several domains of the well-being and health promoting, there was a scarcity of longitudinal studies for well-being (Cai et al., 2013; Ma & Huebner, 2008) and health-promoting behaviors (Rew et al., 2013). Longitudinal studies enable researchers to detect the changes. With longitidunal designs, it is possible

to determine the directionality of the relationships among study variables (Singer, Willett, & Willett, 2003). In their reviews on perceived parenting and attachment security, Koehn and Kerns (2018) suggested the usage of parenting and attachment security as predictors simultaneously and longitudinally, so that, it would be clearer to see the directionality of these constructs. Thus, the current study employed a longitudinal design to investigate the predictive roles of perceived positive parenting and attachment security for adolescents' well-being and health-promoting behaviors.

In addition, it was also suggested that negative affectivity could impact the association between perceived positive parenting and attachment security, which, in turn predict adolescents' well-being and health-promoting behaviors. Thus, moderated mediation models were also employed to explore the interplay of perceived positive parenting, negative affectivity and attachment security in predicting outcomes, for mothers and fathers, respectively.

In the light of the literature mentioned above, the current study aimed to explore three main research questions: *i*) How are perceived positive parenting and parental attachment security associated with each other longitudinally among adolescents? *ii*) Does negative affectivity moderate the perceived positive parenting and parental attachment security associations? *iii*) Do perceived positive parenting and parental attachment security have predictive roles for adolescents' well-being and health-promoting behaviors? The following hypotheses were tested for six outcome variables (psychological well-being, subjective well-being, physical activity, health responsibility, diet and stress management) with mother-related and father-related predictors, respectively.

Hypothesis-1.*Continuity hypothesis*: It was hypothesized that perceived positive parenting and attachment security would show continuity, for mothers and fathers, respectively.

Hypothesis-2. *Cross-lag hypothesis*: It was hypothesized that there would be positive cross-lagged associations between perceived positive parenting and attachment security from Time 1 to Time 2 and from Time 2 to Time 3 for mothers and fathers, respectively.

Hypothesis-3. *Predictive roles hypthesis*: It was hypothesized that perceived positive parenting and attachment security would be positively associated with the outcome variables (psychological well-being, subjective well-being, physical activity, health responsibility, diet and stress management), for mothers and fathers, respectively.

Hypothesis-4. *Moderation hypothesis*: It was also expected that negative affectivity would moderate the association between perceived positive parenting in Time 1 and attachment security in Time 2, for mothers and fathers, respectively. It was hypothesized that negative affectivity would moderate the association between perceived positive parenting and attachment security, for mothers and fathers, respectively. It was expected that the perceived positive parenting – attachment security link would be weaker for the adolescents with higher levels of negative affectivity.

Hypothesis-5. *Modareted mediation hypothesis*: In addition, a moderated mediation model was offered. The mediator role of attachment security was tested longitudinally; it was expected that perceived positive parenting in Time 1 would predict attachment security in Time 2, which, in turn, would predict outcome variables in Time 3.

Since gender and age of adolescents were shown to be impactful on study variables (Balluerka et al., 2016; Meeus, Iedema, Maassen, & Engels, 2005), they were taken as control variables in the current study.

CHAPTER 2

METHOD

2.1. Participants

For Time1 (T1) 648 adolescents and their mothers participated in the study. The adolescents were from 5th, 6th, 7th, 9th, 10th, and 11th-grades. Since they would be under the stress of high school or university entry exams, 8th and 12th graders were not included in the study. Four hundred nine adolescents were girls (63.1%), and 239 were boys (36.9%). The ages of adolescents ranged between 9.62 and 17.87 years (M = 13.37, SD = 2.34). Mothers' age ranged between 27 and 55 (M = 40.88, SD = 5.26). Information regarding the parents' education, work, marital status, and family income was summarized in Table 1.

Six months after T1, the same students in the same schools were contacted. In the second data collection time (T2), 561 students (87% of the original sample) and 401 mothers (62% of the original sample) filled in the questionnaires. Six months after the T2, again same students in the same schools were contacted. In the third data collection (T3), 316 students (49% of the original sample) and 229 mothers (35% of the original sample) filled in the questionnaires.

2.2. Measures

For the current study, outcome variables were grouped under two main themes; health behaviors (health responsibility, diet, physical activity, and stress management) and well-being (psychological well-being and subjective well-being). The independent variable is perceived general positive parenting, which was calculated as the mean of autonomy support, responsiveness, and positive parenting for mothers and fathers, respectively. The mediator variable is parental

attachment security for mothers and fathers, respectively. The moderator variable between independent variables and mediator is negative affect of adolescents. The mothers filled in the demographic information form and negative affectivity scale, whereas the adolescents filled in all the other scales. Means, standard deviations, and internal consistency scores of all the scales used in the study are summarized in Table 2. The descriptions and explanations of all the measures are given below.

2.2.1. Consent Form

Consent forms were sent to mothers at T1 (see Appendix A) in enclosed envelopes with questionnaire packages. The mothers were given both acceptance and rejection choices. Students whose mothers consented to their children's participation were included in the study.

2.2.2. Demographical Information Form

The demographical information form included questions about mothers' and fathers' educational levels, employment status, and marital status. There were also items asking the family's monthly income, how many children the family had; and age, gender, and birth order of the child who participated in the current study (Appendix B).

2.2.3. Temperament: Negative Affectivity

As a temperamental characteristic, negative affectivity was included in the current study. Negative affect was measured via Early Adolescent Temperament Questionnaire-Revised Version (EATQ-R; Capaldi & Rothbart, 1992; Ellis & Rothbart, 2001; Muris & Meesters, 2009) mother form (15 items). The Turkish translation was conducted by Akkaya (2017). For the current study, the items were reviewed, and re-worded by Akkaya, Güneş, and Berument (2018, See Appendix C). Mothers evaluated their children`s negative affect in

Time 1. Items were measured on 5-Point-Likert Scales (1-almost never true, to 5, almost always true). Internal consistency scores for the original study ranged between .65 and .82, and for the current study, it was reported as .85.

Table 1. *Frequencies and Percentages of Demographics*

	Frequency	**Percentage**
Sample	648	100
5th graders	131	20.2
6th Graders	105	16.2
7th Graders	99	15.3
9th Graders	84	13.0
10th graders	109	16.8
11th graders	120	18.5
Mothers' education		
Literate	10	1.5
Primary school	130	19.8
High school	260	40.0
Vocational school/Open university	2	0.3
University	225	34.3
Masters	23	3.5
PhD	1	0.2
Missing	3	0.5
Mothers' work status		
Not working	375	57.9
Part-time	35	5.4
Full-time	229	35.3
Missing	9	1.4
Fathers' education		
Literate	6	0.9
Primary school	73	11.3
High school	206	31.8
Vocational school/Open university	1	0.2
University	290	44.8
Masters	64	9.9
PhD	2	0.3
Missing	6	0.9
Parental marital status		
Married	607	93.7
Divorced	39	6.0
Loss of a spouse	1	0.2
Missing	1	0.2
Family income		
Less than 1603 TL	26	4.0
1603-2500 TL	126	19.4
2501-4000 TL	187	28.9
4001-6000 TL	153	23.6
6001-8000 TL	88	13.6
8001-10000 TL	39	6.0
10000 TL and above	17	2.6
Missing	12	1.9

2.2.4. Student Consent Form

A student consent form was presented to the adolescents before the data collection (Appendix D). This form included the aims of the study with an easier explanation, so that the adolescents would be able to understand their contributions to a scientific research.

2.2.5. Psychological Well-being

Psychological Well-being Scale for Children (Opree et al., 2018) was developed based on Ryff's (1989) model of psychological well-being. The scale consisted of 24 items and six subscales, which were environmental mastery, personal growth, purpose in life, self-acceptance, autonomy, and positive relation with others. For the original scale, the internal consistency scores ranged between .43 (autonomy) and .88 (self-acceptance), which were considered as acceptable. The scale was developed in Dutch culture and published in English language (Opree et al., 2018). The scale was translated into Turkish and back-translated to English for this study (Appendix E). To examine the factor structure of the translated version, following the factor structure of the original version, confirmatory factor analyses (CFA) with six subscales were carried out. Error covariance arrows between the items were added, a CFA showed adequate fit with the data (χ^2 = 539.375, DF = 230, p < .001, χ^2 /DF = 2.345, CFI = .901, GFI = .936, AGFI = .917, RMSEA = .046, [CI: .041; .051]). Since there were no subscale-specific hypotheses, and for the parsimony purposes, mean scores based on 24 items were calculated for three time points. CFA showed good fit also for the single factor solution (χ^2 = 515.775, DF = 226, p < .001, χ^2 /DF = 2.282, CFI = .907, GFI = .936, AGFI = .915, RMSEA = .045, [CI: .040; .050]). Across all time points, as a single factor, the scale had adequate internal consistency Cronbach alpha scores (α_{Time1} = .78, α_{Time2} = .79, α_{Time3} = .83).

2.2.6. Subjective Well-being

Subjective well-being was measured with Huebner Student Life Satisfaction Scale (Huebner, 1993; 2001), which is a single factor measure, consists of seven items measured on 6-Point Likert scale (1 "*Strongly Disagree*" to 6 "*Strongly Agree*"). The internal consistency of the original scale was reported to be .84. The scale was translated into Turkish and back to English for this study (Appendix F). Adolescents reported their own life satisfaction for all three time points. Across all time points, the scale had adequate internal consistency Cronbach alpha scores (α_{Time1} = .85, α_{Time2} = .86, α_{Time3} = .85).

2.2.7. Health Behaviors

To measure the health behavior of teenagers, Healthy Life Style Behavior Scale – II (Bahar et al., 2008; Walker & Hill-Polerecky, 1996; Walker, Sechrist, & Pender, 1987) was utilized. The original scale consisted of six factors, namely, health responsibility, physical activity, diet, spiritual development, interpersonal relationships, and stress management. In total, the scale had 52 item, evaluated on 4-Point-Likert scales (from never to always). The internal consistency scores for the original study ranged between .79-.87. Turkish adaptation of the scale was conducted by Bahar and colleagues (2008). The internal consistency scores ranged between .64 and .79 for adult samples. The scale was used in previous studies with Turkish high school students, but internal consistency scores were not reported (Çelebi, Gündogdu, & Kizilkaya, 2017). For the current study, physical activity (8 items, α_{Time1} = .85, α_{Time2} = .83, α_{Time3} = .86), health responsibility (8 items, α_{Time1} = .83, α_{Time2} = .83, α_{Time3} = .84), diet (9 items, α_{Time1} = .71, α_{Time2} = .75, α_{Time3} = .79), and stress management (8 items, α_{Time1} = .75, α_{Time2} = .76, α_{Time3} = .78) factors were used. Across all time points, all the subscales had adequate internal consistency Cronbach alpha scores. Adolescents reported their own health behaviors (Appendix G).

2.2.8. Perceived Positive Parenting

Positive parenting scores were calculated as the mean of three different perceived parenting scales: *i*) warmth/acceptance/care *ii*) autonomy support, and *iii*) responsiveness, for mothers and fathers respectively.

Warmth/acceptance/care

Warmth/acceptance/care scale was a subscale of Parenting Styles Questionnaire, which was was developed by Sümer and Güngör (1999) by including items from already existing measures and writing new culture-specific items. Warmth/acceptance/care subscale consists of eleven items, and each item is evaluated on a 4-Point-Likert Scale. "No" was scored as 0, "Yes sometimes" as 1, "Yes, most of the time" as 2, and "Yes, always" as 3. In the original study, the internal consistency of the scale was reported to be $\alpha = .84$ for both parents. For the current study, adolescents evaluated positive parenting for mothers (Appendix H) and fathers (Appendix I), respectively. Both mother ($\alpha_{Time1} = .90$, $\alpha_{Time2} = .90$, $\alpha_{Time3} = .90$) and father ($\alpha_{Time1} = .92$, $\alpha_{Time2} = .92$, $\alpha_{Time3} = .92$) scales had good internal consistency Cronbach alpha values across three time points.

Autonomy Support

Autonomy support was assessed with Perceived Parental Autonomy Support Scale (P-PASS; Mageau, et al., 2015). The scale is consisted of two higher-order factors: autonomy supporting behaviors, and autonomy controlling behaviors. For the current study, only autonomy-supporting behaviors higher-order factor, which has 12 items, was included. For the current study, adolescents evaluated their mothers' (Appendix J) and fathers' (Appendix K) autonomy support. Each item was evaluated on a 4-Point-Likert scale, with responses ranging from zero to three. "*No*" was scored as 0, "*Yes sometimes*" as 1, "*Yes, most of the time*" as 2, and "*Yes, always*" as 3. In the original version, the internal consistency scores of these subscales were in the acceptable range (α

= .63 to .78). The scale was translated into Turkish and back to English for this study. Since the scale was translated into Turkish for the first time, to assure the adequacy of the psychometric properties of the scale, confirmatory factor analyses (CFA) with T1 data for mother and father reports were conducted, respectively. Confirmatory analyses were conducted for both mother (χ^2 = 149.150, DF = 49, p < .001, χ^2 /DF = 3.044, CFI = .977, GFI = .961, AGFI = .939, RMSEA = .057, [CI: .046; .067]) and father (χ^2 =168.488, DF = 48, p < .001, χ^2 /DF = 3.510, CFI = .975, GFI = .958, AGFI = .931, RMSEA = .063, [CI: .053; .073]) scales, and fit indices were satisfactory. Both mother (α_{Time1} = .92, α_{Time2} = .94, α_{Time3} = .94) and father (α_{Time1} = .92, α_{Time2} = .92, α_{Time3} = .92) scales had good internal consistency scores Cronbach alpha across time points.

Responsiveness

Responsiveness was assessed by responsiveness subscale of Parenting Styles Inventory – II (Darling & Toyokawa, 1997). The scale is consisted of five items, and items were evaluated on 4-Point-Likert scales. "*No*" was scored as 0, "*Yes sometimes*" as 1, "*Yes, most of the time*" as 2, and "*Yes, always*" as 3. In the original study, the internal consistency of the scale was reported to be α = .74 in the original study. The scale was translated into Turkish – and back translated to English for this study. In addition, three items from the partner responsiveness scale (Selçuk & Ong, 2013; Schuster, Kessler, & Aseltine, 1990) were taken. These three items were reworded for mothers and fathers. To examine the factor structure of these eight items, separate confirmatory factor analyses for mothers (χ^2 = 49.096, DF = 20, p < .001, χ^2 /DF = 2.455, CFI = .979, GFI = .982, AGFI = .967, RMSEA = .047, [CI: .031; .064]) and father (χ^2 =91.111, DF = 20, p < .001, χ^2 /DF = 4.556, CFI = .966, GFI = .967, AGFI = .940, RMSEA = .074, [CI: .059; .090]) were run, respectively. Both analyses showed satisfactory fit with the data. No modification was required. Both mother (α_{Time1} = .77, α_{Time2} = .79, α_{Time3} = .81) and father (α_{Time1} = .84, α_{Time2} = .89, α_{Time3} = .86) scales had good internal consistency scores ha across time points. (Appendices L for mother scale, M for father scale).

2.2.9. Attachment

Kerns Security Scale (Kerns, Klepac, & Cole, 1996) was utilized to measure secure attachment toward mother and father. The scale consists of 15 items for each parent, and items measured on a 4-point scale using Harter's (1982) "Some kids... other kids..." format. The scale was adapted into Turkish culture by Sümer and Anafarta-Şendağ (2009) and they reported internal consistency scores as $\alpha = .84$ for mothers and $\alpha = .88$ for fathers. Adolescents evaluated their attachment security for mothers (Appendix N) and fathers (Appendix O), respectively. Both mother ($\alpha_{Time1} = .87$, $\alpha_{Time2} = .88$, $\alpha_{Time3} = .89$) and father ($\alpha_{Time1} = .90$, $\alpha_{Time2} = .91$, $\alpha_{Time3} = .91$) scales had good internal consistency scores across time points.

2.3. Procedure

The ethical approval was taken from the Institutional Review Board of Middle East Technical University. After the ethical permission was granted (see Appendix P), an application to Ankara Branch of Ministry of Education was submitted. After Ankara Branch of Ministry of Education granted the permission (see Appendix Q), the researcher contacted to schools and explained the procedure and the longitudinal nature of the study. To increase the attendance, for the first and second waves, 30 gift coupons from hobby markets, and for the third wave, gift coupons from sports markets were given by sweeps takings. In schools where principals agreed to participate, the researcher first sent consent forms and surveys in enclosed envelopes. Data collection times were arranged with the school principal and/or the school psychological guidance service for students whose mothers agreed to participate. The students filled in the questionnaires approximately in one class hour. Undergraduate students helped the students to clarify the items when needed during the data collection. For the second and third waves, data collection times were arranged with the principals and/or with school guidance services. The first wave took place between October and November 2018. The students filled in the questionnaires. After students

finished the questionnaires, they were given mother questionnaires in closed envelopes. The researcher visited schools to collect mothers' questionnaires. The second wave took place between April and May 2019. The third wave took place between October and November 2019. There were sweepstakes for the gift coupons at the end of each data collection wave.

Table 2. *Means, standard deviations and rage of study variables*

		T1		T2		T3	
Variable	**Subscale**	**Mean(*SD*)**	**Min - Max**	**Mean(*SD*)**	**Min - Max**	**Mean(*SD*)**	**Min. – Max.C.**
Psy. well-being	Adolescent rep.	2.29(.31)	1.08-3.00	2.30(.31)	.79-3.00	2.31(.34)	.83-2.96
Sub. well-being	Adolescent rep.	3.50(1.07)	.00-5.00	3.50(1.06)	.14-5.00	3.65(.99)	.57-5.00
Health beh.	Physical act.	1.42(.72)	.00-3.00	1.50(.68)	.00-3.00	1.49(.73)	.00-3.00
	Health resp.	1.62(.70)	.00-3.00	1.72(.68)	.00-3.00	1.73(.70)	.00-3.00
	Diet	1.80(.52)	.33-3.00	1.81(.53)	.44-3.00	1.84(.52)	.44-3.00
	Stress man.	1.58(.61)	.00-3.00	1.61(.59)	.00-3.00	1.67(.62)	.13-3.00
Gen. Pos. Par.	Mother	3.22(.64)	.71-4.00	3.26(.64)	.68-4.00	3.28(.38)	.71-4.00
	Father	3.06(.75)	.00-4.00	3.08(.79)	.00-4.00	3.16(.74)	.06-4.00
Attach. security	Mother	3.31(.53)	1.20-4.00	3.35(.52)	1.33-4.00	3.36(.53)	1.07-4.00
	Father	3.16(.63)	1.13-4.00	3.20(.63)	1.07-4.00	3.24(.59)	1.11-4.00
Negative affect	Mother rep.	1.53(.66)	.13-4.00	-	-	-	-

SD: Standard deviation, Rep. = Report, Gen. Pos.Par. = General Positive Parenting.

CHAPTER 3

RESULTS

3.1. Data Analytic Strategies

For each outcome variable (psychological well-being, subjective well-being, physical activities, health responsibility, diet, and stress management), the results were reported in the following order: *i*) correlations among outcome variables and predictors across time points, *ii*) cross-lagged analyses with mother-related predictors, *iii*) cross-lagged analyses with father-related predictors, *iv*) longitudinal moderated mediation analysis with mother-related predictors and *v*) longitudinal moderated mediation analysis with father predictors cross-lagged analyses with father-related predictors.

Correlations and moderated mediation analyses were carried out with SPSS 27. The "PROCESS" Macro, Model 7, v.3.5.3 (Hayes, 2021) with bias-corrected 95% confidence intervals (n = 10000) was used to test the significance of moderated mediation models. Hayes's Model 7 enables researchers simultaneously *i*) to test the moderated impact of the predictor on the mediator (on the path a), and in turn, *ii*) if the mediator is related to the outcome (path b). The moderated mediation models were repeated with mother- and father-related predictors for each outcome. In moderated mediation analyses, predictor variable was perceived parenting measured in Time1, mediator was attachment to parent in Time2, and outcome variables (psychological well-being, subjective, well-being, physical activity, health responsibility, diet, and stress management) were measured in Time3. In addition, moderating role of negative affect (measured in Time 1 as mother report) on the association between perceived parenting T1 – attachment to parent T2 was tested.

Cross-lagged analyses were carried out with AMOS 23. To evaluate the model fit of the cross-lagged analyses, the following indices were benefitted:

$\chi 2/df$, CFI (Comparative Fit Index), NFI (Normed Fit Index), and RMSEA (Root Mean Square Error of Approximation) plus its 90% confidence interval (CI). Since $\chi 2$ depended on sample size, to eliminate that, Bentler (1989) suggested considering values of $\chi 2$/df less than 5.00 as appropriate for model fit. RMSEA values that are less than .08 are considered acceptable, while NFI and CFI values exceeding .95 indicate a good fit (Browne and Cudeck 1993; Schreiber, Nora, Stage, Barlow, & King, 2006).

3.2. Predicting Psychological Well-being

3.2.1. Correlations of Psychological Well-being and Study Variables

The bivariate correlations between psychological well-being and other study variables are shown in Table 3.

3.2.2. Psychological Well-being Cross-lagged Analyses – Mother Model

To test the continuity (Hypothesis 1), cross-lag (Hypothesis 2), and predictive roles (Hypothesis 3) hypotheses with father-related predictors and psychological well-being, cross-lagged analysis was run. Since the RMSEA exceeded crital value of .08, the cross-lag model showed poor fit with the data ($\chi 2$ = 62.719, DF = 13, $\chi 2$ /DF = 4,825, $p < .001$, NFI = .976, CFI = .980, RMSEA = .109 [CI: .083; .137], N =324). Figure 1 showed the standardized regression coefficients and p values for these coefficients among the variables.

Table 3. *Correlations between Psychological Well-being and Predictors*

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
1.PWB-T1	1.00																
2.PWB-T2	.67**	1.00															
3.PWB-T3	.59**	.74**	1.00														
4.Att – M.T1	.47**	.44**	.40**	1.00													
5.Att – M.T2	.40**	.54**	.47**	.67**	1.00												
6.Att – M.T3	.41**	.58**	.60**	.61**	.76**	1.00											
7.Att – F.T1	.51**	.45**	.46**	.63**	.49**	.51**	1.00										
8.Att – F.T2	.41**	.49**	.49**	.48**	.61**	.60**	.73**	1.00									
9.Att – F.T3	.32**	.43**	.51**	.40**	.52**	.66**	.63**	.70**	1.00								
10.Neg.Aff. T1	-.25**	-.15**	-.13**	-.23**	-.16**	-.15**	-.28**	-.18*	-.13*	1.00							
11.Par – M.T1	.61**	.55**	.51**	.81**	.64**	.59**	.55**	.45**	.36**	-.22**	1.00						
12.Par – M.T2	.49**	.63**	.52**	.67**	.82**	.68**	.50**	.53**	.46**	-.16**	.76**	1.00					
13.Par – M.T3	.23**	.30**	.29**	.28**	.31**	.39**	.22**	.28**	.24**	-.006	.33**	.40**	1.00				
14.Par – F.T1	.59**	.48**	.51**	.57**	.44**	.47**	.84**	.66**	.55**	-.31**	.67**	.55**	.26**	1.00			
15.Par – F.T2	.47**	.56**	.57**	.51**	.57**	.57**	.73**	.84**	.66**	-.23**	.53**	.66**	.33**	.78**	1.00		
16.Par – F.T3	.47**	.53**	.62**	.44**	.48**	.61**	.64**	.65**	.83**	-.17**	.51**	.60**	.32**	.71**	.79**	1.00	
17.Age-T1	-.28**	-.18**	-.30**	-.22**	-.18**	-.24**	-.31**	-.25**	-.30**	.12**	-.24**	-.23**	-.25**	-.34**	-.31**	-.39**	1.00
18.Gender	.01	.06	.07	.04	.06	.10	.02	.01	.06	.09*	.09*	.10*	.004	.02	-.01	.08	.13**

PWB: Psychological well-being, Att – M.: Attachment security to mother, Att – F.: Attachment security to father, Neg. Aff.:Negative affect, Par – M: Parenting mother, Par – F: Parenting father, Gender – Boys: 0, Girls: 1, *$p < .05$, **$p < .01$.

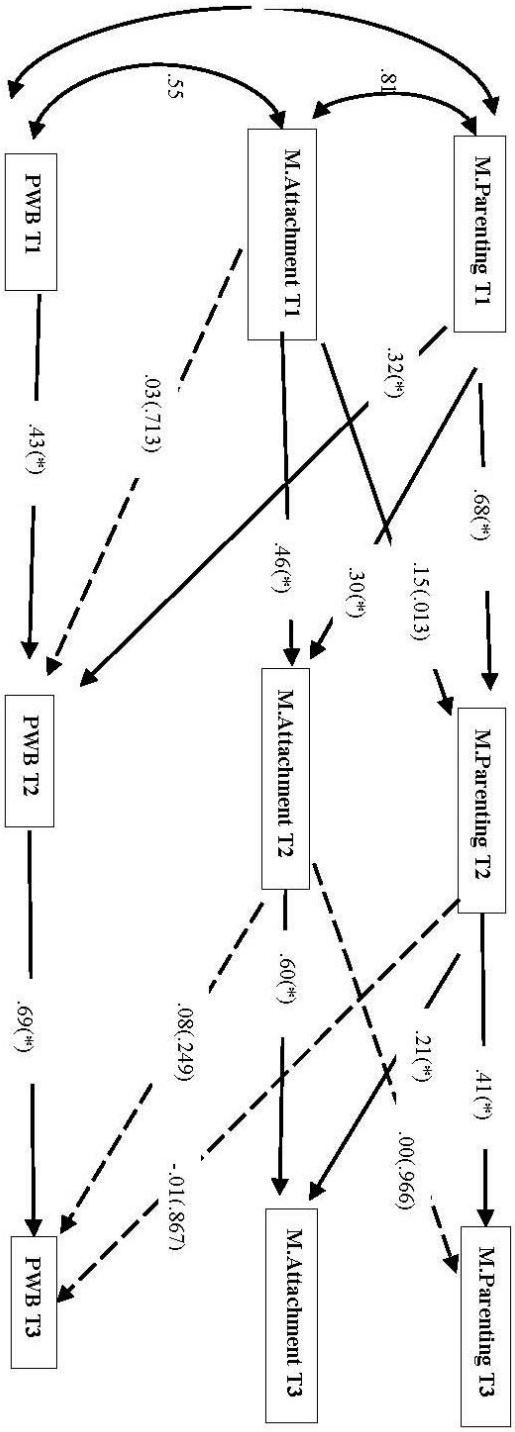

Figure 1. *Cross-lag model predicting psychological well-being with mother variables*

Note. For the Time 1 variables, correlations among the variables were presented. For each association, first, standardized regression coefficients and then *p* values in paratheses were given. * indicates the p values less than .001. Nonsignificant paths were shown with dotted lines. PWB: Psychological Well-being. M.Parenting: Perceived positive maternal parenting. M.Attachment: Attachment security to mother.

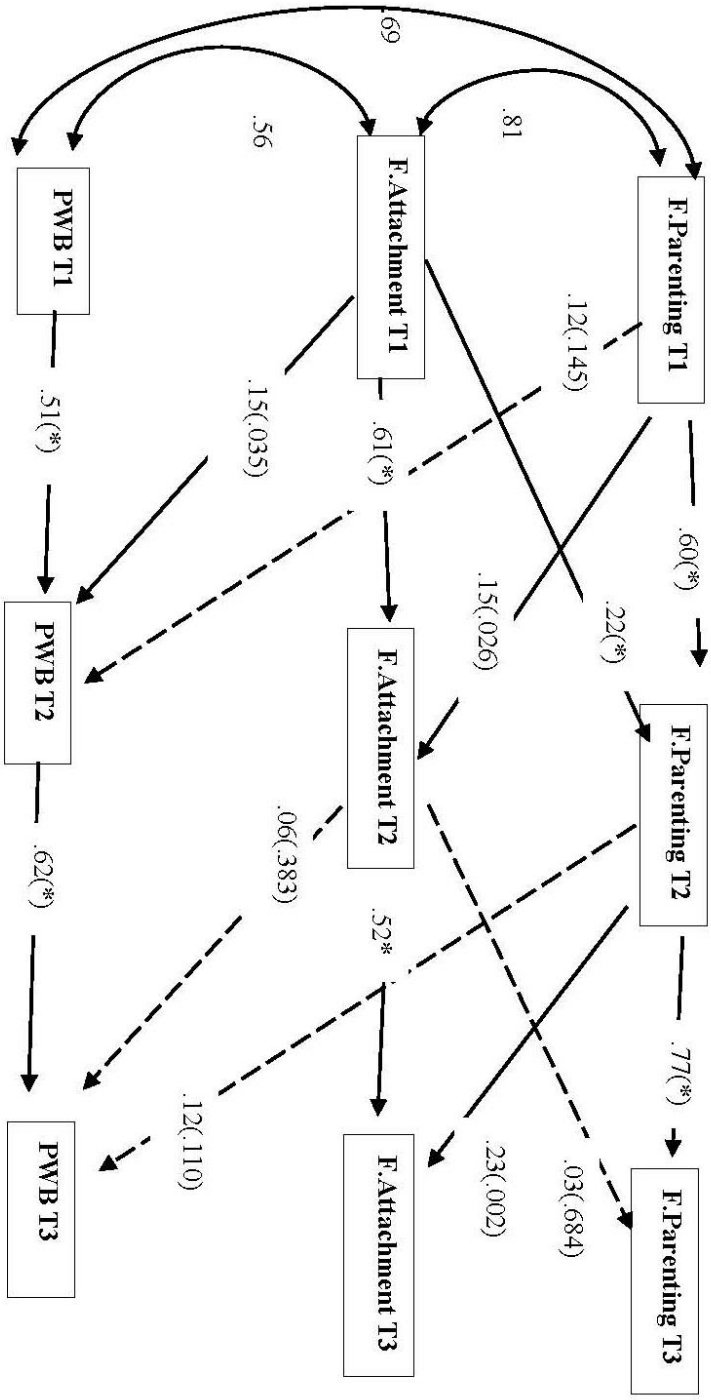

Figure 2. *Cross-lag model predicting psychological well-being with father variables*

Note. For the Time 1 variables, correlations among the variables were presented. For each association, first, standardized regression coefficients and then *p* values in paratheses were given. * indicates the p values less than .001. Nonsignificant paths were shown with dotted lines. PWB: Psychological Well-being. F.Parenting: Perceived positive paternal parenting. F.Attachment: Attachment security to father

3.2.3. Psychological Well-being Cross-lagged Analyses – Father Model

To test the continuity (Hypothesis 1), cross-lag (Hypothesis 2), and predictive roles (Hypothesis 3) hypotheses with father-related predictors and psychological well-being, , a cross-lagged analysis was run. Since the RMSEA exceeded crital value of .08, the cross-lag model showed poor fit with the data ($\chi 2$ = 62.719, DF = 13, $\chi 2$ /DF = 4,825, p < . 001, NFI = .976, CFI = .980, RMSEA = .109 [CI: .083; .137], N =324). Figure 2 showed the standardized regression coefficients and p values for these coefficients among the variables.

3.2.4. Psychological Well-being Longitudinal Moderated-mediation Analyses – Mother Model

To test the moderation (Hypothesis 4) and moderated mediation (Hypothesis 5) hypotheses with mother-related predictors and psychological well-being scores in T3, a moderated mediation analysis (Hayes, 2015, Model 7) with mother-related predictors was carried out (N = 284, See Figure 3).

In *path a*, perceived maternal positive parenting in T1 was positively and significantly associated with attachment security to mother in T2 (Unstandardized B = .509, SE = .042, t = 12.256, p < .001, 95% CI[.427; .590]). However, neither negative affect at T1 (Unstandardized B = .006, SE = .037, t = .163, p = .570, 95% CI[-.026; .020]), nor the interaction of negative affect T1 and perceived maternal positive parenting T1 (Unstandardized B = .027, SE = .048, t = .569, p = .570, 95% CI[-.067; .122]) were associated with attachment security to mother in T2. Since there was zero within confidence intervals (CI) of the interaction term, the negative affect did not moderate the relationship between perceived maternal positive parenting T1 and attachment security to mother in T2. The control variables age (Unstandardized B = -.003, SE = .012, t = -.272, p = .786, 95% CI[-.026; .020]) and gender (Unstandardized B = .042, SE = .048, t = .872, p = .384, 95% CI[-.053; .138]) were not associated with attachment to mother at T2.

For the *path b*, maternal attachment security in T2 (Unstandardized *B* = .170, *SE* = .046, *t* = 3,687, *p* < .001, 95% CI[.079; .260]) was positively and significantly linked to psychological well-being in T3. Yet, the index of moderated mediation was not significant (Unstandardized estimate = .005, *SE* = .011, 95% CI[-.015; .031]). In other words, the moderated mediation model was not supported.

Since the moderated mediation model (Model 7) was not supported, the predictor role of perceived maternal positive parenting on psychological well-being in T3 via attachment security to mother in T2 was tested with a simple mediation model (PROCESS Model 4, Hayes, 2013). This mediation model explained approximately 27 % of the variance in psychological well-being at T3 (R^2 = .268, *F*(3,280) = 34.084, *p* < .001). Age (Unstandardized *B* = -.025, *SE* = .009, *t* = -2.722, *p* = .007, 95% CI[-.043; -.007]) and gender (Unstandardized *B* = ,035, *SE* = .038, *t* = .987, *p* = .349, 95% CI[-.039; .110]) of the adolescent were control variables for psychological well-being at T3.

In *path a*, perceived maternal positive parenting in T1 was positively and significantly associated with attachment security to mother in T2 (Unstandardized *B* = .516, *SE* = .037, *t* = 13.806, *p* < .001, 95% CI[.442; .589]) (See Figure 4). The control variables age (Unstandardized *B* = -.003, *SE* = .012, *t* = -.250, *p* = .803, 95% CI[-.026; .020]) and gender (Unstandardized *B* = .039, *SE* = .048, *t* = .817, *p* = .415, 95% CI[-.055; .133]) were not associated with attachment to mother at T2.

For the *path b*, maternal attachment security in T2 (Unstandardized *B* = .170, *SE* = .046, *t* = 3,687, *p* < .001, 95% CI[.079; .260]) was positively and significantly linked to psychological well-being in T3. The indirect effect of perceived maternal positive parenting at T1 on psychological well-being at T3, via attachment security to mother at T2, was significant (Unstandardized *B* = .088, *SE* = .023, 95% CI[.040; .133]), because there was no zero between the confidence intervals. There was still a significant direct association between perceived maternal positive parenting at T1 and psychological well-being at T3 (Unstandardized *B* = .151, *SE* = .037, *t* = 4.032, *p* < .001, 95% CI[.224; .433]). These results suggested a partial mediation. In other words, perceived maternal

positive parenting was positively associated with attachment security to the mother at T2, which, in turn, was also positively linked to psychological well-being at T3. In addition, there was a reverse association between the age of the adolescent and psychological well-being. Older adolescents reported lower levels of psychological well-being at T3. There was no significant difference between girls and boys in terms of outcome.

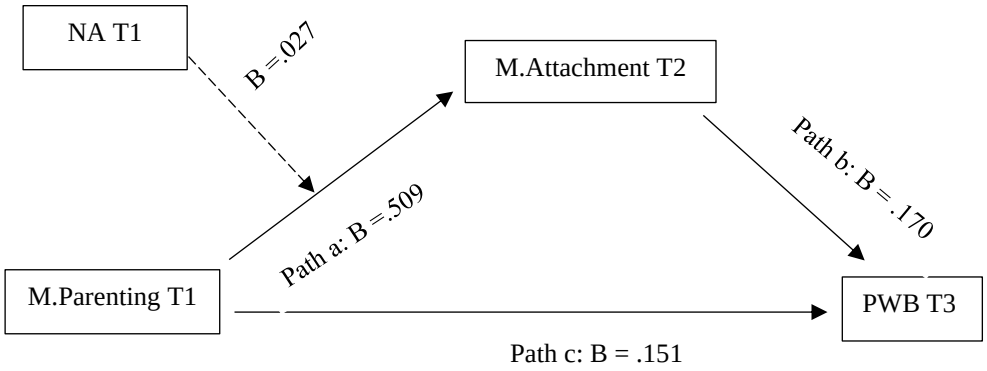

Figure 3. *Moderated mediation model (Model 7) predicting psychological well-being with mother variables*

Note. The unstandardized B values were presented for a, b, and paths on the figure. NA: Negative affect, PWB: Psychological Well-being. Dotted lines indicate nonsignificant paths.

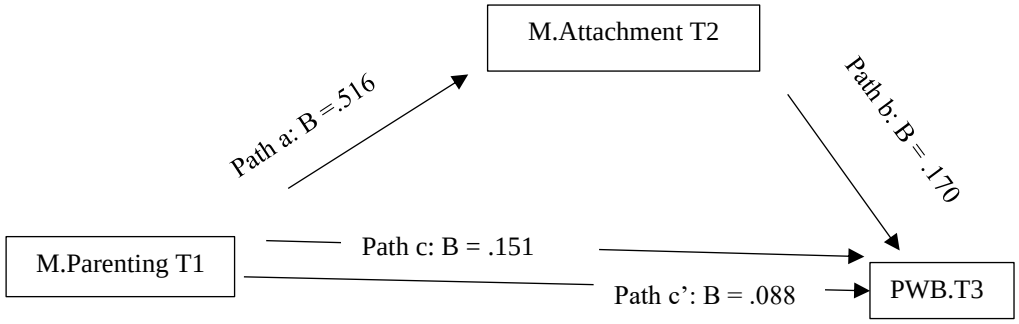

Figure 4. *Mediation model (Model 4) predicting psychological well-being with mother variables*

Note. The unstandardized B values were presented for a, b, c, and c' paths on the figure. NA: Negative affect, PWB: Psychological Well-being. Dotted lines indicate nonsignificant paths.

3.2.5. Psychological Well-being Longitidunal Moderated-mediation Analyses – Father Model

To test the moderation (Hypothesis 4) and moderated mediation (Hypothesis 5) hypotheses with father-related predictors and psychological well-being scores in T3, a moderated mediation analysis (Hayes, 2015, Model 7) with father-related predictors was carried out (N = 285, See Figure 5).

In *path a*, perceived paternal positive parenting at T1 was positively and significantly associated with attachment security to father in T2 (Unstandardized B = .548, SE = .048, t = 11.376, p < .001, 95% CI[.453; .643]). However, neither negative affect at T1 (Unstandardized B = .079, SE = .047, t = 1.697, p = .091, 95% CI[-.013; .172]), nor the interaction of negative affect T1 and perceived paternal positive parenting T1 (Unstandardized B = -.002, SE = .056, t = -.044, p = .965, 95% CI[-.113; .108]) were associated with attachment security to father in T2. Since there was zero within confidence intervals (CI) of the interaction term, the negative affect did not moderate the relationship between perceived paternal parenting T1 and attachment to father at T2. The control variables age (Unstandardized B = -.013, SE = .015, t = -.861, p = .390, 95% CI[-.042; .016]) and gender (Unstandardized B = .048, SE = .059, t = .816, p = .415, 95% CI[-.068; .164]) were not associated with attachment security to father at T2.

For the *path b*, attachment security to father in T2 (Unstandardized B = .118, SE = .033, t = 3,535, p < .001, 95% CI[.052; .184]) was positively and significantly linked to psychological well-being in T3. Yet, the index of moderated mediation was not significant (Unstandardized estimate = .000, SE = .012, 95% CI[-.028; .020]), because there was zero within the confidence intervals. In other words, the moderated mediation model with father predictors was not supported.

Since the moderated mediation model was not supported, the predictor role of perceived paternal parenting in T1 on psychological well-being in T3 via attachment to father in T2 was tested with a simple mediation model (PROCESS Model 4, Hayes, 2013). This mediation model explained approximately 30 % of the variance in psychological well-being at T3 (R^2 = .301, F(4, 281) = 30.215, p

< .001, See Figure 6). Age (Unstandardized *B* = -.019, *SE* = .009, *t* = -2.067, *p* = .040, 95% CI[-.037; -.001]) and gender (Unstandardized *B* = ,026, *SE* = .037, *t* = .702, *p* = .483, 95% CI[-.047; .098]) of the adolescent were control variables for psychological well-being at T3.

In *path a*, perceived paternal positive parenting in T1 was positively and significantly associated with attachment security to father in T2 (Unstandardized *B* = .523, *SE* = .044, *t* = 11.975, *p* < .001, 95% CI[.437; .609]) (See Figure 6). The control variables age (Unstandardized *B* = -.016, *SE* = .012, *t* = -1.062, *p* = .289, 95% CI[-.045; .013]) and gender (Unstandardized *B* = .053, *SE* = .059, *t* = .891, *p* = .374, 95% CI[-.064; .169]) were not significantly associated with attachment security to father at T2.

For the *path b*, attachment security to father in T2 (Unstandardized *B* = .174, *SE* = .037, *t* = 4,687, *p* < .001, 95% CI[.101; .246]) was positively and significantly linked to psychological well-being in T3. The indirect effect of perceived paternal positive parenting at T1 on psychological well-being at T3, via attachment security to father at T2, was significant (Unstandardized *B* = .091, *SE* = .032, 95% CI[.027; .153]), because there was no zero between the confidence intervals. There was still a significant direct association between perceived paternal positive parenting at T1 and psychological well-being at T3 (Unstandardized *B* = .118, *SE* = .033, *t* = 3.535, *p* < .001, 95% CI[.052; .184]). These results suggested a partial mediation. In other words, perceived paternal positive parenting was positively associated with attachment security to father at T2, which, in turn, was also positively linked to psychological well-being at T3. In addition, there was a reverse association between the age of the adolescent and psychological well-being. Older adolescents reported lower levels of psychological well-being at T3. There was no significant difference between girls and boys in terms of outcome.

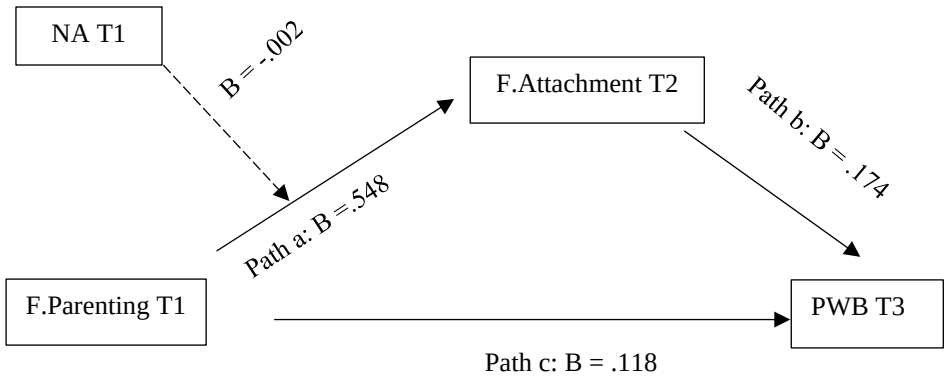

Figure 5. *Moderated-mediation model (Model 7) predicting psychological well-being with father variables*

Note. The unstandardized B values were presented for a, b, and paths on the figure. NA: Negative affect, PWB: Psychological Well-being. Dotted lines indicate nonsignificant paths.

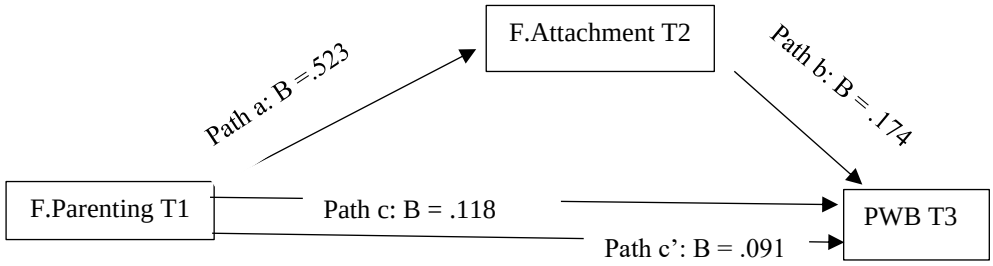

Figure 6. *Mediation model (Model 4) predicting psychological well-being with father variables*

Note. The unstandardized B values were presented for a, b, c, and c' paths on the figure. NA: Negative affect, PWB: Psychological Well-being. Dotted lines indicate nonsignificant paths.

3.3. Predicting Subjective Well-being

3.3.1. Correlations Subjective Well-being and Study Variables

The bivariate correlations between subjective well-being and other study variables were shown in Table 4.

Table 4. *Correlations between Subjective Well-being and Predictors*

Variables	1.Subjective Well-being T1	2.Subjective Well-being T2	3.Subjective Well-being T3
1.Subjective Well-being-T1	1.00		
2.Subjective Well-being-T2	.66**	1.00	
3.Subjective Well-being-T3	.63**	.70**	1.00
4.Attachment – M.T1	.53**	.42**	.36**
5.Attachment – M.T2	.42**	.53**	.46**
6.Atttachment – M.T3	.47**	.49**	.54**
7.Atttachment – F.T1	.52**	.45**	.36**
8.Attachment – F.T2	.44**	.50**	.40**
9.Attachment – F.T3	.39**	.42**	.53**
10.Negative Affect T1	-.28**	-.23**	-.15**
11.P.Parenting – M.T1	.57**	.47**	.39**
12.P.Parenting. – M.T2	.49**	.59**	.48**
13.P.Parenting. – M.T3	.21**	.25**	.24**
14.P.Parenting. – F.T1	.57**	.47**	.42**
15.P.Parenting – F.T2	.51**	.58**	.49**
16.P.Parenting – F.T3	.51**	.51**	.58**
17.Age-T1	-.33**	-.25**	-.30**
18.Gender	.05	.02	.03

M.: Mother, F.: Father, P.Parenting: Perceived positive parenting, Attachment: Attachment security, Gender – Boys: 0, Girls: 1, *p < .05, **p < .01.

3.3.2. Subjective Well-being Cross-lagged Analyses – Mother Model

To test the continuity (Hypothesis 1), cross-lag (Hypothesis 2), and predictive roles (Hypothesis 3) hypotheses with mother-related predictors and subjective well-being, , a cross-lagged analysis was run. Since the RMSEA exceeded the critical value of .08, the cross-lag model showed poor fit with the data ($\chi 2$ = 43.864, DF = 13, $\chi 2$ /DF = 3.374, p < .001, NFI = .978, CFI = .984, RMSEA = .086 [CI: .059; .114], N =324). Figure 7 showed the standardized regression coefficients and p values for these coefficients among the variables.

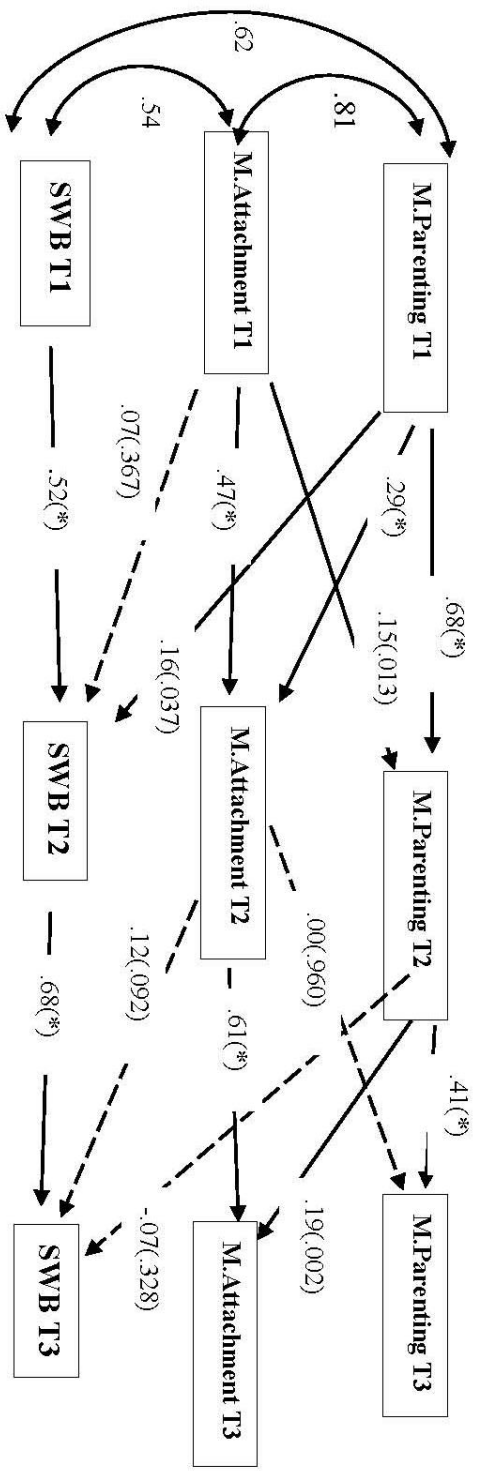

Figure 7. *Cross-lag model predicting subjective well-being with mother variables*

Note. For the Time 1 variables, correlations among the variables were presented. For each association, first, standardized regression coefficients, and then *p* values in paratheses were given. * indicates the *p* values less than .001. Nonsignificant paths were shown with dotted lines. SWB: Subjective Well-being. Parenting: Perceived positive maternal parenting. Attachment: Attachment security to mother.

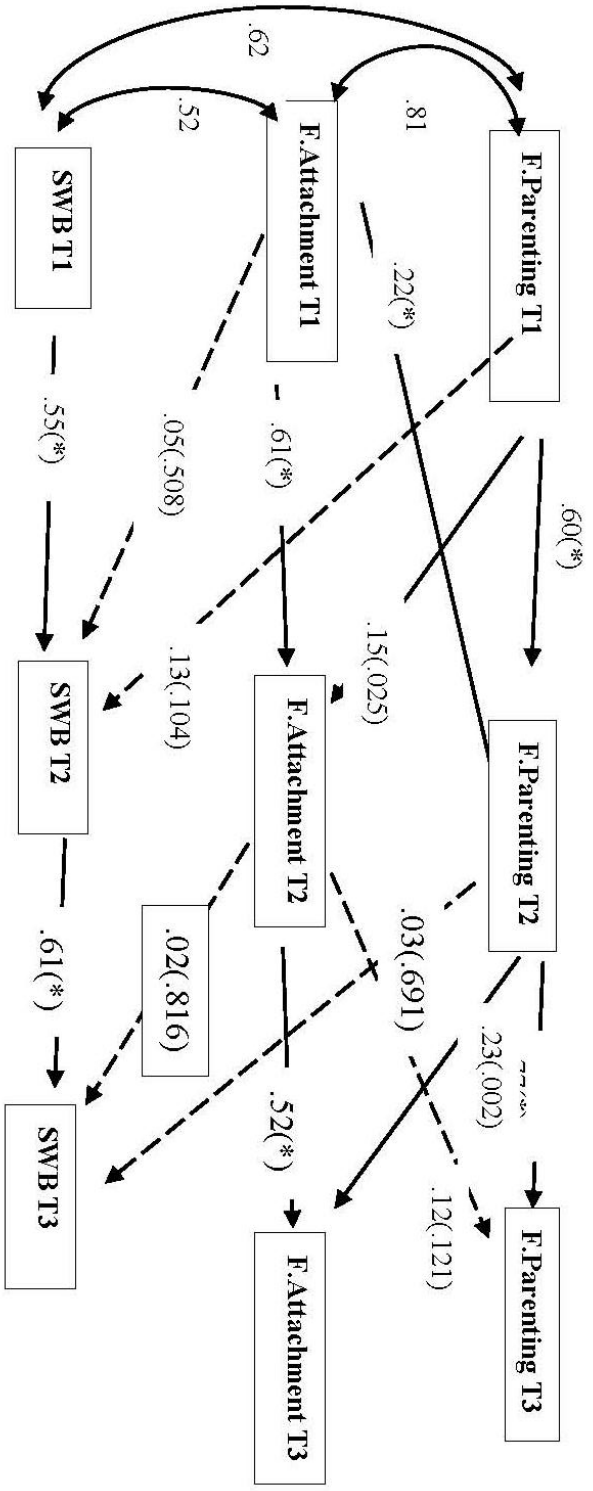

Figure 8. *Cross-lag model predicting subjective well-being with father variables*

Note. For the Time 1 variables, correlations among the variables were presented. For each association, first, standardized regression coefficients, and then *p* values in paratheses were given. * indicates the *p* values less than .001. Nonsignificant paths were shown with dotted lines. SWB: Subjective Well-being. Parenting: Perceived positive paternal parenting. Attachment: Attachment security to fathers.

3.3.3. Subjective Well-being Cross-lagged Analyses – Father Model

To predict the interplay of perceived paternal parenting and attachment to fathers in relation to subjective well-being across three time points, a cross-lagged analysis was run. Since the RMSEA exceeded the critical value of .08, and $\chi 2$ /DF ratio exceed 5.00, the cross-lag model showed poor fit to the data ($\chi 2$ = 84.670, DF = 13, $\chi 2$ /DF = 6.513, p < .001, NFI = .966, CFI = .971, RMSEA = .131 [CI: .105; .158], N =324). Figure 8 showed the standardized regression coefficients and p values for these coefficients among the variables.

3.3.4. Subjective Well-being Longitidunal Moderated-mediation Analyses – Mother Model

To test the moderation (Hypothesis 4) and moderated mediation (Hypothesis 5) hypotheses with mother-related predictors and subjective well-being scores in T3, a moderated mediation analysis (Hayes, 2015, Model 7) was carried out (N = 285, See Figure 9).

In *path a*, perceived maternal positive parenting in T1 was positively and significantly associated with attachment security to mother in T2 (Unstandardized B = .510, SE = .041, t = 12.313, p < .001, 95% CI[.428; .591]). However, neither negative affect at T1 (Unstandardized B = .007, SE = .037, t = .189, p = .851, 95% CI[-.067; .081]), nor the interaction of negative affect T1 and perceived maternal positive parenting T1 (Unstandardized B = .027, SE = .048, t = .572, p = .568, 95% CI[-.067; .122]) were associated with attachment to mother at T2. Since there was zero within confidence intervals (CI) of the interaction term, the negative affect did not moderate the relationship between perceived maternal positive parenting T1 and attachment security to mother in T2. The control variables age (Unstandardized B = -.003, SE = .012, t = -.266, p = .790, 95% CI[-.026; .020]) and gender (Unstandardized B = .040, SE = .048, t = .831, p = .407, 95% CI[-.055; .135]) were not associated with attachment security to mother at T2. For the *path b*, attachment security to mother at T2 (Unstandardized B = .641, SE = .134, t = 4.785, p < .001, 95% CI[.377; .904])

was positively and significantly linked to subjective well-being in T3. Yet, the index of moderated mediation was not significant (Unstandardized estimate = .018, *SE* = .042, 95% CI[-.050; .122]). In other words, the moderated mediation model was not supported.

Since the moderated mediation model was not supported, the predictor role of perceived maternal positive parenting on subjective well-being in T3 via attachment security to mother in T2 was tested with a simple mediation model (PROCESS Model 4, Hayes, 2013). This mediation model explained approximately 26 % of the variance in subjective well-being at T3 (R^2 = .261, $F(4,280) = 24.671$, $p < .001$). Age (Unstandardized *B* = -.085, *SE* = .026, *t* = -3.244, *p* = .001, 95% CI[-.136; -.033]) and gender (Unstandardized *B* = ,068, *SE* = .107, *t* = .631, *p* = .529, 95% CI[-.143; .279]) of the adolescent were control variables for subjective well-being at T3.

In *path a*, perceived maternal positive parenting in T1 was positively and significantly associated with attachment security to mother in T2 (Unstandardized *B* = .517, *SE* = .037, *t* = 13.855, *p* < .001, 95% CI[.443; .590]) (See Figure 10). The control variables age (Unstandardized *B* = -.003, *SE* = .012, *t* = -.246, *p* = .806, 95% CI[-.026; .020]) and gender (Unstandardized *B* = .037, *SE* = .048, *t* = .774, *p* = .439, 95% CI[-.057; .131]) were not associated with attachment security to mother at T2.

For the *path b*, maternal attachment security in T2 (Unstandardized *B* = .641, *SE* = .134, *t* = 4,785, *p* < .001, 95% CI[.377; .904]) was positively and significantly linked to subjective well-being in T3. The indirect effect of perceived maternal positive parenting at T1 on subjective well-being at T3, via attachment to mother at T2, was significant (Unstandardized *B* = .331, *SE* = .089, 95% CI[.152; .503]), because there was no zero between the confidence intervals. The direct association between perceived maternal positive parenting at T1 and subjective well-being at T3 was not significant (Unstandardized *B* = .199, *SE* = .109, *t* = 1.836, *p* = .067, 95% CI[-.014; .413]). These results suggested a full mediation model. In other words, perceived maternal positive parenting was positively associated with attachment security to mother at T2, which, in turn, was also positively linked to subjective well-being at T3. In addition , there was

a reverse association between the age of the adolescent and subjective well-being (Unstandardized *B* = -.086, *SE* = .027, *t* = -3.193, *p* = .002, 95% CI[-.140; -.033]). Older adolescents reported lower levels of subjective well-being at T3. There was no significant difference between girls and boys in terms of outcome (Unstandardized *B* = .091, *SE* = .111, *t* = .821, *p* = .412, 95% CI[-.128; .310]).

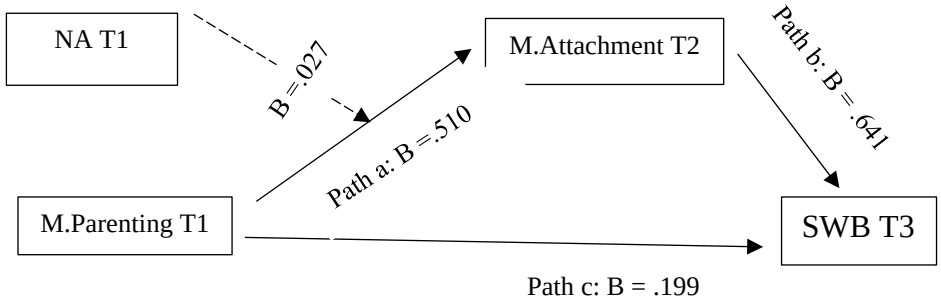

Figure 9. *Moderated mediation model (Model 7) predicting subjective well-being with mother variables*

Note. The unstandardized B values were presented for a, b, and paths on the figure. M.: Mother, NA: Negative affect, SWB: Subjective Well-being. Dotted lines indicate nonsignificant paths.

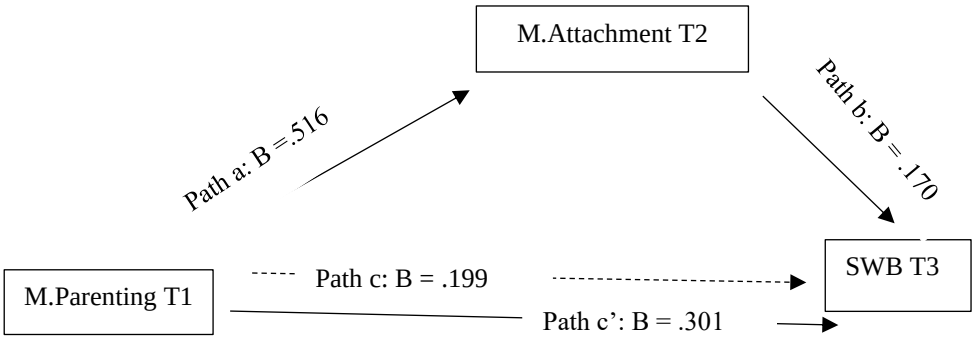

Figure 10. *Mediation model (Model 4) predicting subjective well-being with mother variables*

Note. The unstandardized B values were presented for a, b, c, and c' paths on the figure. M.: Mother, SWB: Subjective Well-being. Dotted lines indicate nonsignificant paths.

3.3.5. Subjective Well-being Longitidunal Moderated-mediation Analyses – Father Model

To test the moderation (Hypothesis 4) and moderated mediation (Hypothesis 5) hypotheses with father-related predictors and subjective well-being scores in T3, a moderated mediation analysis (Hayes, 2015, Model 7) was carried out (*N* = 287, See Figure 11).

In *path a*, perceived paternal positive parenting at T1 was positively and significantly associated with attachment security to father in T2 (Unstandardized *B* = .547, *SE* = .048, *t* = 11.403, *p* < .001, 95% CI[.452; .641]). However, neither negative affect at T1 (Unstandardized *B* = .079, *SE* = .047, *t* = 1.685, *p* = .093, 95% CI[-.013; .171]), nor the interaction of negative affect T1 and perceived paternal positive parenting T1 (Unstandardized *B* = -.003, *SE* = .056, *t* = -.051, *p* = .959, 95% CI[-.113; .107]) were associated with attachment security to father in T2. Since there was zero within confidence intervals (CI) of the interaction term, the negative affect did not moderate the relationship between perceived paternal positive parenting T1 and attachment security to father at T2. The control variables age (Unstandardized *B* = -.013, *SE* = .015, *t* = -.869, *p* = .385, 95% CI[-.042; .016]) and gender (Unstandardized *B* = .050, *SE* = .059, *t* = .848, *p* = .397, 95% CI[-.066; .165]) were not associated with attachment to father at T2. For the *path b*, attachment security to father in T2 (Unstandardized *B* = .402, *SE* = .111, *t* = 3,618, *p* < .001, 95% CI[.183; .620]) was positively and significantly linked to subjective well-being in T3. Yet, the index of moderated mediation was not significant (Unstandardized estimate = -.001, *SE* = .027, 95% CI[-.061; .052]), because there was zero within the confidence intervals. In other words, the moderated mediation model with father predictors was not supported.

Since the moderated mediation model was not supported, the predictor role of perceived paternal positive parenting on subjective well-being in T3 via attachment security to father in T2 was tested with a simple mediation model (PROCESS Model 4, Hayes, 2013, see Figure 12). This mediation model explained approximately 30 % of the variance in subjective well-being at T3 (R^2 = .301, *F*(4, 281) = 30.215, *p* < .001). Age (Unstandardized *B* = -.019, *SE* = .009,

t = -2.067, *p* = .040, 95% CI[-.037; -.001]) and gender (Unstandardized *B* = ,026, *SE* = .037, *t* = .702, *p* = .483, 95% CI[-.047; .098]) of the adolescent were control variables for subjective well-being at T3.

In *path a*, perceived paternal positive parenting in T1 was positively and significantly associated with attachment security to father in T2 (Unstandardized *B* = .523, *SE* = .044, *t* = 12.003, *p* < .001, 95% CI[.437; .608]) (See Figure 12). The control variables age (Unstandardized *B* = -.016, *SE* = .015, *t* = -1.067, *p* = .287, 95% CI[-.045; .013]) and gender (Unstandardized *B* = .054, *SE* = .059, *t* = .915, *p* = .361, 95% CI[-.062; .169]) were not significantly associated with attachment security to father at T2.

For the *path b*, attachment security to father in T2 (Unstandardized *B* = .402, *SE* = .111, *t* = 3,618, *p* < .001, 95% CI[.183; .620]) was positively and significantly linked to subjective well-being in T3. The indirect effect of perceived paternal positive parenting at T1 on subjective well-being at T3, via attachment security to father at T2, was significant (Unstandardized *B* = .210, *SE* = .079, 95% CI[.051; .361]), because there was no zero between the confidence intervals. There was still a significant direct association between perceived paternal positive parenting at T1 and subjective well-being at T3 (Unstandardized *B* = .248, *SE* = .100, *t* = 2.487, *p* = .013, 95% CI[.052; .445]). These results suggested a partial mediation. In other words, perceived paternal positive parenting was positively associated with attachment security to father at T2, which, in turn, was also positively linked to subjective well-being at T3. In addition , there was a reverse association between the age of the adolescent and psychological well-being (Unstandardized *B* = -.076, *SE* = .028, *t* = -2.708, *p* = .007, 95% CI[-.131; -.021]). Older adolescents reported lower levels of psychological well-being at T3. There was no significant difference between girls and boys in terms of outcome (Unstandardized *B* = .082, *SE* = .112, *t* = .729, *p* = .466, 95% CI[-.139; .302]).

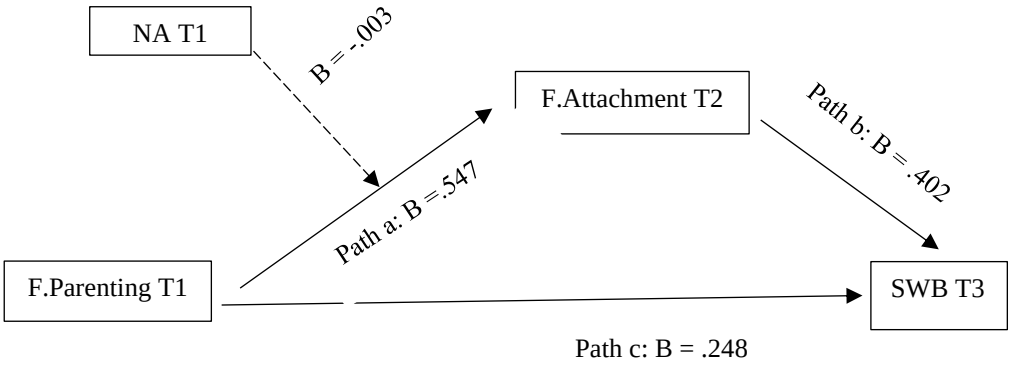

Figure 11. *Moderated mediation model (Model 7) predicting subjective well-being with father variables*

Note. The unstandardized B values were presented for a, b, and paths on the figure. NA: Negative affect, F.:Father, SWB: Subjective Well-being. Dotted lines indicate nonsignificant paths.

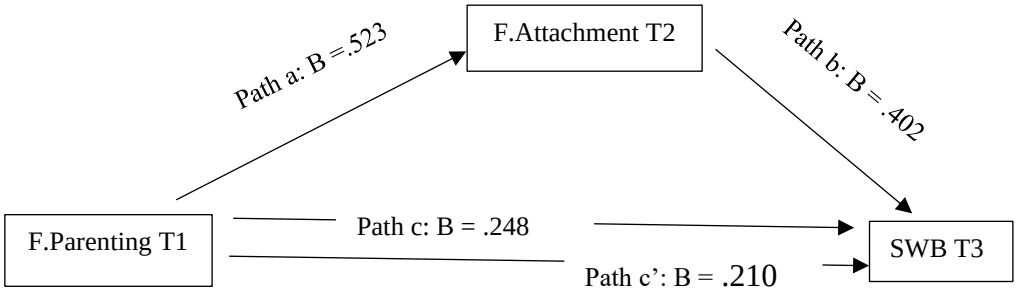

Figure 12. *Mediation model (Model 4) predicting subjective well-being with father variables*

Note. The unstandardized B values were presented for a, b, c, and c' paths on the figure. F.: Father, SWB: Subjective Well-being. Dotted lines indicate nonsignificant paths.

3.4. Predicting Physical Activity

3.4.1. Correlations between Physical Activity and Study Variables

The bivariate correlations between physical activity and other study variables are shown in Table 5.

Table 5. *Correlations between **Physical Activity** and Predictors*

Variables	1.Physical activity-T1	2.Physical activity -T2	3.Physical activity –T3
1.Physical activity-T1	1.00		
2.Physical activity -T2	.71**	1.00	
3.Physical activity -T3	.64**	.76**	1.00
4.Attachment – M.T1	.12*	.17**	.20**
5.Attachment – M.T2	.08	.20**	.19**
6.Atttachment – M.T3	.19**	.23**	.19**
7.Atttachment – F.T1	.19**	.21**	.20**
8.Attachment – F.T2	.10*	.23**	.20**
9.Attachment – F.T3	.16**	.20**	.21**
10.Negative Affect T1	-.13**	-.05	-.01
11.P.Parenting – M.T1	.22**	.24**	.31**
12.P.Parenting. – M.T2	.13**	.25**	.21**
13.P.Parenting. – M.T3	.12*	.19**	.24**
14.P.Parenting. – F.T1	.26**	.27**	.27**
15.P.Parenting – F.T2	.18**	.31**	.25**
16.P.Parenting – F.T3	.23**	.31**	.31**
17.Age-T1	-.34**	-.30**	-.40**
18.Gender	-.23**	-.18**	-.18**

M.: Mother, F.: Father, P.Parenting: Perceived positive parenting, Gender – Boys: 0, Girls: 1, *p < .05, **p < .01.

3.4.2. Physical Activity Cross-lagged Analyses – Mother Model

To test the continuity (Hypothesis 1), cross-lag (Hypothesis 2), and predictive roles (Hypothesis 3) hypotheses with mother-related predictors and physical activity scores of adolescents, , a cross-lagged analysis was run. The cross-lag model showed good fit with the data ($\chi 2$ = 32.357, DF = 13, $\chi 2$ /DF = 2.489, p = .002, NFI = .982, CFI = .989, RMSEA = .068 [CI: .039; .098], N =324). Figure 13 showed the standardized regression coefficients and p values for these coefficients among the variables (See Figure 13).

Like in previous analyses, perceived maternal positive parenting (T1→T2: β = .673, Uns. B = .657, S.E. = .058, *t* = 11.306, *p* < .001, T2→T3: β = .407, Uns. B = .246, S.E. = .054, *t* = 4.591, *p* < .001), attachment security to mother (T1→T2: β = .465, Uns. B = .450, S.E. = .067, *t* = 6.722, *p* < .001, T2→T3: β = .601, Uns. B = .621, S.E. = .064, *t* = 9.706, *p* < .001), and physical activity (T1→T2: β = .685, Uns. B = .623, S.E. = .039, *t* = 16.069, *p* < .001, T2→T3: β = .750, Uns. B = .825, S.E. = .042, *t* = 19.682, *p* < .001) showed continuity across three time points. The results showed that, perceived maternal positive parenting in T1 was significantly associated with attachment security to mothers in T2 (β = .294, Uns. B = .235, S.E. = .055, *t* = 4.268, *p* < .001), but not linked to physical activity in T2 (β = .054, Uns. B = .055, S.E. = .075, *t* = .734, *p* = .463). Attachment security to mother in T1 was linked to perceived maternal positive parenting in T2 (β = .153, Uns. B = .180, S.E. = .071, *t* = 2.551, *p* = .011), but not significantly related to physical activity in T2 (β = .033, Uns. B = .041, S.E. = .088, *t* = .466, *p* = .641). Perceived maternal positive parenting in T2 was significantly associated with attachment security to mothers in T3 (β = .208, Uns. B = .176, S.E. = .052, *t* = 3.361, *p* < .001), but not linked to physical activity in T3 (β = .017, Uns. B = .020, S.E. = .075, *t* = .266, *p* = .790). Attachment security to mother was in T2 associated neither with perceived maternal positive parenting (β = .002, Uns. B = .001, S.E. = .066, *t* = .018, *p* = .986), nor with the physical activity in T3 (β = .009, Uns. B = .013, S.E. = .090, *t* = .143, *p* = .886).

3.4.3. Physical Activity Cross-lagged Analyses – Father Model

To test the continuity (Hypothesis 1), cross-lag (Hypothesis 2), and predictive roles (Hypothesis 3) hypotheses with father-related predictors and physical activity scores of adolescents, a cross-lagged analysis was run. Since the RMSEA exceeded the critical value of .08, the cross-lag model showed poor fit with the data ($\chi 2$ = 57.459, DF = 13, $\chi 2$ /DF = 4.420, *p* < .001, NFI = .976, CFI = .981, RMSEA = .103 [CI: .077; .131], *N* =324). Figure 14 showed the standardized regression coefficients and *p* values for these coefficients among the variables.

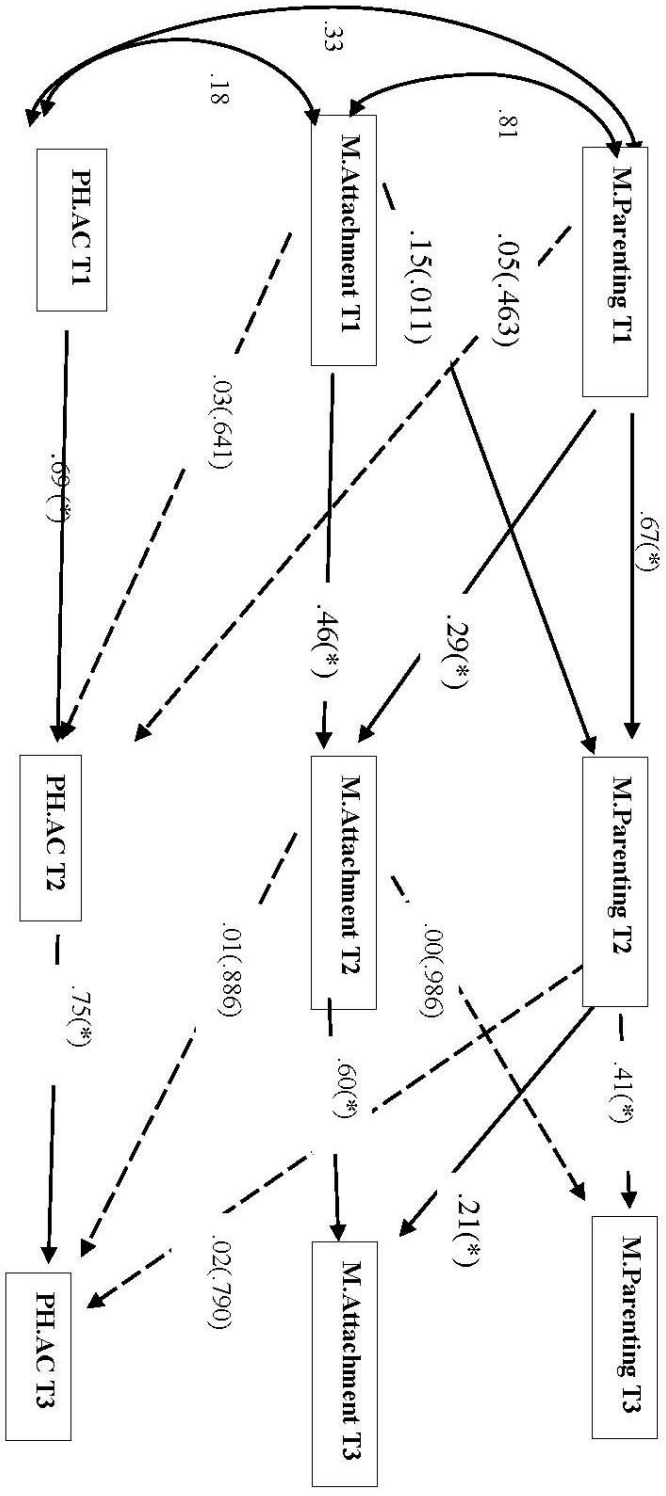

Figure 13. *Cross-lag model predicting physical activity with mother variables*

Note. For the Time 1 variables, correlations among the variables were presented. For each association, first, standardized regression coefficients, and then *p* values in paratheses were given. * indicates the *p* values less than .001. Nonsignificant paths were shown with dotted lines. PH.AC: Physical Activity. Parenting: Perceived positive maternal parenting. Attachment: Attachment security to mothers.

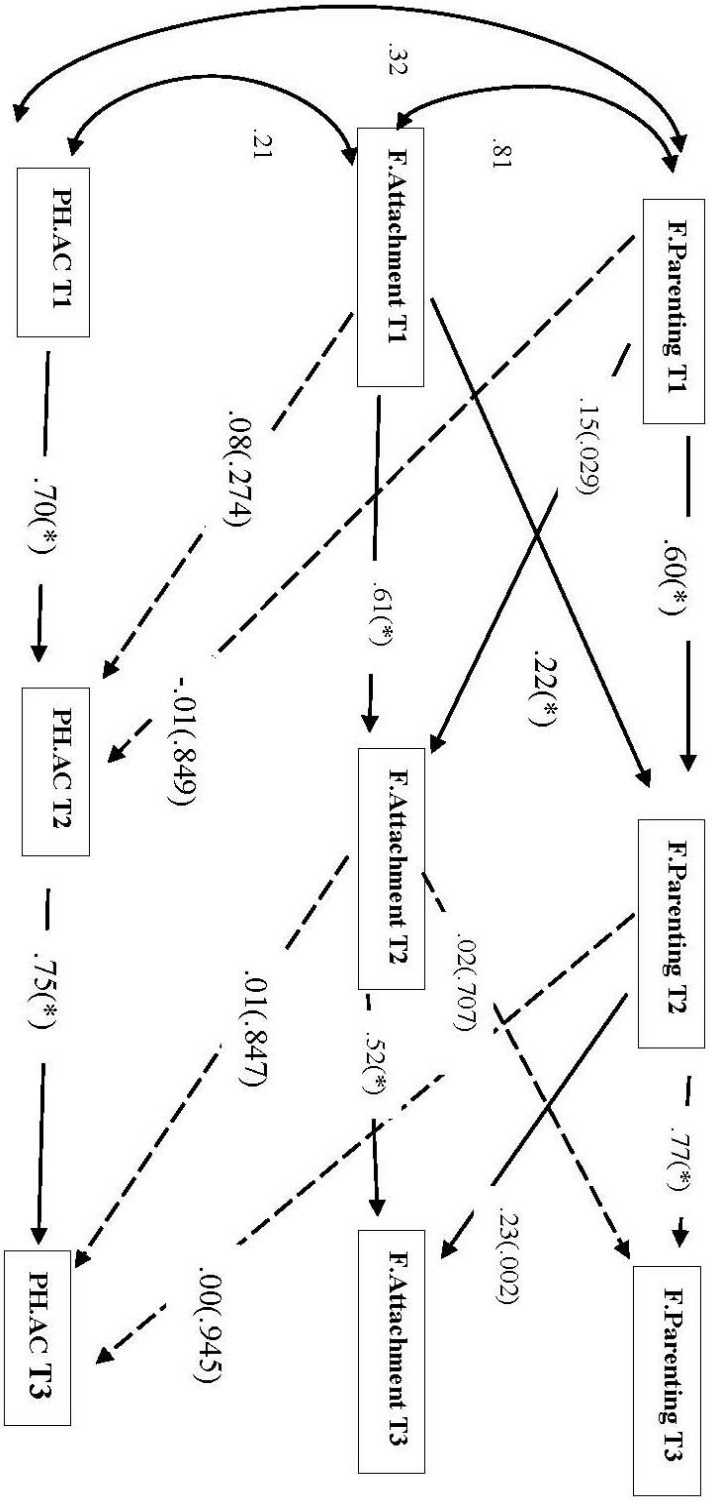

Figure 14. *Cross-lag model predicting physical activity with father variables*

Note. For the Time 1 variables, correlations among the variables were presented. For each association, first, standardized regression coefficients, and then *p* values in paratheses were given. * indicates the *p* values less than .001. Nonsignificant paths were shown with dotted lines. PH.AC: Physical Activity. Parenting: Perceived positive paternal parenting. Attachment: Attachment security to fathers.

3.4.4. Physical Activity Longitidunal Moderated-mediation Analyses – Mother Model

To test the moderation (Hypothesis 4) and moderated mediation (Hypothesis 5) hypotheses with mother-related predictors and the physical activity scores in T3, a moderated mediation analysis (Hayes, 2015, Model 7) was carried out (*N* = 285, See Figure 15).

In *path a*, perceived maternal positive parenting in T1 was positively and significantly associated with attachment security to mother in T2 (Unstandardized *B* = .510, *SE* = .041, *t* = 12.313, *p* < .001, 95% CI[.428; .591]). However, neither negative affect at T1 (Unstandardized *B* = .007, *SE* = .037, *t* = .189, *p* = .851, 95% CI[-.067; .081]), nor the interaction of negative affect T1 and perceived maternal positive parenting T1 (Unstandardized *B* = .027, *SE* = .048, *t* = .572, *p* = .568, 95% CI[-.067; .122]) were not associated with attachment security to mother at T2. Since there was zero within confidence intervals (CI) of the interaction term, the negative affect did not moderate the relationship between perceived maternal parenting T1 and attachment to mother in T2. The control variables age (Unstandardized *B* = -.003, *SE* = .012, *t* = -.266, *p* = .790, 95% CI[-.026; .020]) and gender (Unstandardized *B* = .040, *SE* = .048, *t* = .831, *p* = .407, 95% CI[-.055; .135]) were not associated with attachment to mother at T2.

For the *path b*, attachment to mother at T2 (Unstandardized *B* = -.050, *SE* = .102, *t* = -.487, *p* = .626, 95% CI[-.251; .151]) was not associated with physical activity in T3. The index of moderated mediation was not significant (Unstandardized estimate = -.001, *SE* = .009, 95% CI[-.027; .009]). In other words, the moderated mediation model was not supported. Although control variables age (Unstandardized *B* = -.116, *SE* = .020, *t* = -5.864, *p* < .001, 95% CI[-.156; -.077]), gender (Unstandardized *B* = -.244, *SE* = .082, *t* = -2.981, *p* = .003, 95% CI[-.404; -.083]), and *path c*, the association tetween perceived maternal parenting at T1 and physical activity at T3 (Unstandardized *B* = .289, *SE* = .083, *t* = 3.491, *p* = .001, 95% CI[.126; .452]), were significant, since the b path was not significant, there was no indication of mediation, as well.

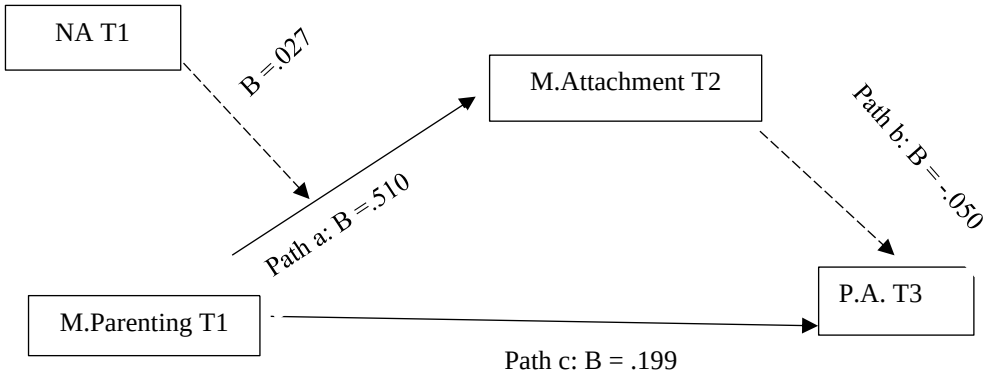

Figure 15. *Moderated mediation model (Model 7) predicting physical activity with mother variables*

Note. The unstandardized B values were presented for a, b, and paths on the figure. M.: Mother, NA: Negative affect, P.A.: Physical activity. Dotted lines indicate nonsignificant paths.

3.4.5. Physical Activity Longitidunal Moderated-mediation Analyses – Father Model

To test the moderation (Hypothesis 4) and moderated mediation (Hypothesis 5) hypotheses with father-related predictors and the physical activity scores in T3, a moderated mediation analysis (Hayes, 2015, Model 7) was carried out (N = 287, See Figure 16).

In *path a*, perceived paternal parenting at T1 was positively and significantly associated with attachment to father in T2 (Unstandardized B = .547, SE = .048, t = 11.403, p < .001, 95% CI[.452; .641]). However, neither negative affect at T1 (Unstandardized B = .079, SE = .047, t = 1.685, p = .093, 95% CI[-.013; .171]), nor the interaction of negative affect T1 and perceived paternal parenting T1 (Unstandardized B = -.003, SE = .056, t = -.051, p = .959, 95% CI[-.113; .107]) were not associated with attachment to father in T2. Since there was zero within confidence intervals (CI) of the interaction term, the negative affect did not moderate the relationship between perceived paternal parenting T1 and attachment to father at T2. The control variables age (Unstandardized B = -.013, SE = .015, t = -.869, p = .385, 95% CI[-.042; .016]) and gender (Unstandardized B = .050, SE = .059, t = .848, p = .397, 95% CI[-.066; .165]) were not associated with attachment to father at T2.

For the *path b*, attachment to father at T2 (Unstandardized *B* = .031, *SE* = .083, *t* = .372, *p* = .710, 95% CI[-.132; .194]) was not associated with physical activity in T3. In addition, *c path*, the association between perceived paternal parenting at T1 and physical activity at T3, was also not significant (Unstandardized *B* = .135, *SE* = .075, *t* = 1.813, *p* = .071, 95% CI[-.012; .282]). Neither moderated mediation, nor the mediation models were supported.

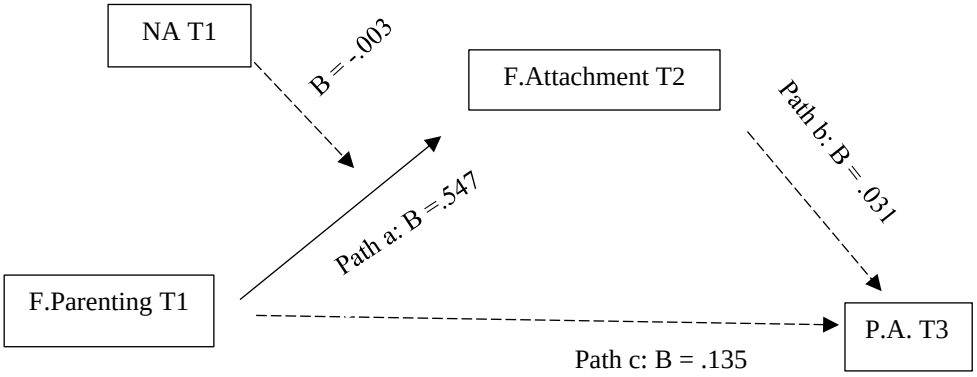

Figure 16. *Moderated mediation model (Model 7) predicting physical activity with father variables*

Note. The unstandardized B values were presented for a, b, and paths on the figure. NA: Negative affect, F.:Father, P.A.: Physical activity. Dotted lines indicate nonsignificant paths.

3.5. Predicting Health Responsibility

3.5.1. Correlations between Health Responsibility and Study Variables

The bivariate correlations between health responsibility and other study variables were shown in Table 6.

Table 6. *Correlations between Health Responsibility and Predictors*

Variables	1.Health responsibility T1	2.Health responsibility T2	3.Health responsibility T3
1.Health responsibility T1	1.00		
2.Health responsibility T2	.62**	1.00	
3.Health responsibility T3	.61**	.61**	1.00
4.Attachment – M.T1	.25**	.23**	.21**
5.Attachment – M.T2	.16**	.26**	.19**
6.Atttachment – M.T3	.24**	.26**	.28**
7.Atttachment – F.T1	.24**	.24**	.21**
8.Attachment – F.T2	.17**	.25**	.21**
9.Attachment – F.T3	.16**	.20**	.26**
10.Negative Affect T1	-.08*	-.09*	-.06
11.P.Parenting – M.T1	.36**	.29**	.28**
12.P.Parenting. – M.T2	.24**	.34**	.26**
13.P.Parenting. – M.T3	.16**	.11	.16**
14.P.Parenting. – F.T1	.35**	.31**	.29**
15.P.Parenting – F.T2	.24**	.33**	.28**
16.P.Parenting – F.T3	.29**	.27**	.35**
17.Age-T1	-.15**	-.14**	-.14**
18.Gender	.003	.06	.08

M.: Mother, F.: Father, T: Time, Gender – Boys: 0, Girls: 1, *$p < .05$, **$p < .01$

3.5.2. Health Responsibility Cross-lagged Analyses – Mother Model

To test the continuity (Hypothesis 1), cross-lag (Hypothesis 2), and predictive roles (Hypothesis 3) hypotheses with mother-related predictors and health responsibility scores of adolescents across three time points, a cross-lagged analysis was run. Since the RMSEA value exceeded .08, the model showed inadequate fit with the data ($\chi2 = 53.113$, DF = 13, $\chi2$ /DF = 4.086, $p <$ .001, NFI = .969, CFI = .976, RMSEA = .098 [CI: .071; .126], N =324). Figure 17 showed the standardized regression coefficients and p values for these coefficients among the variables.

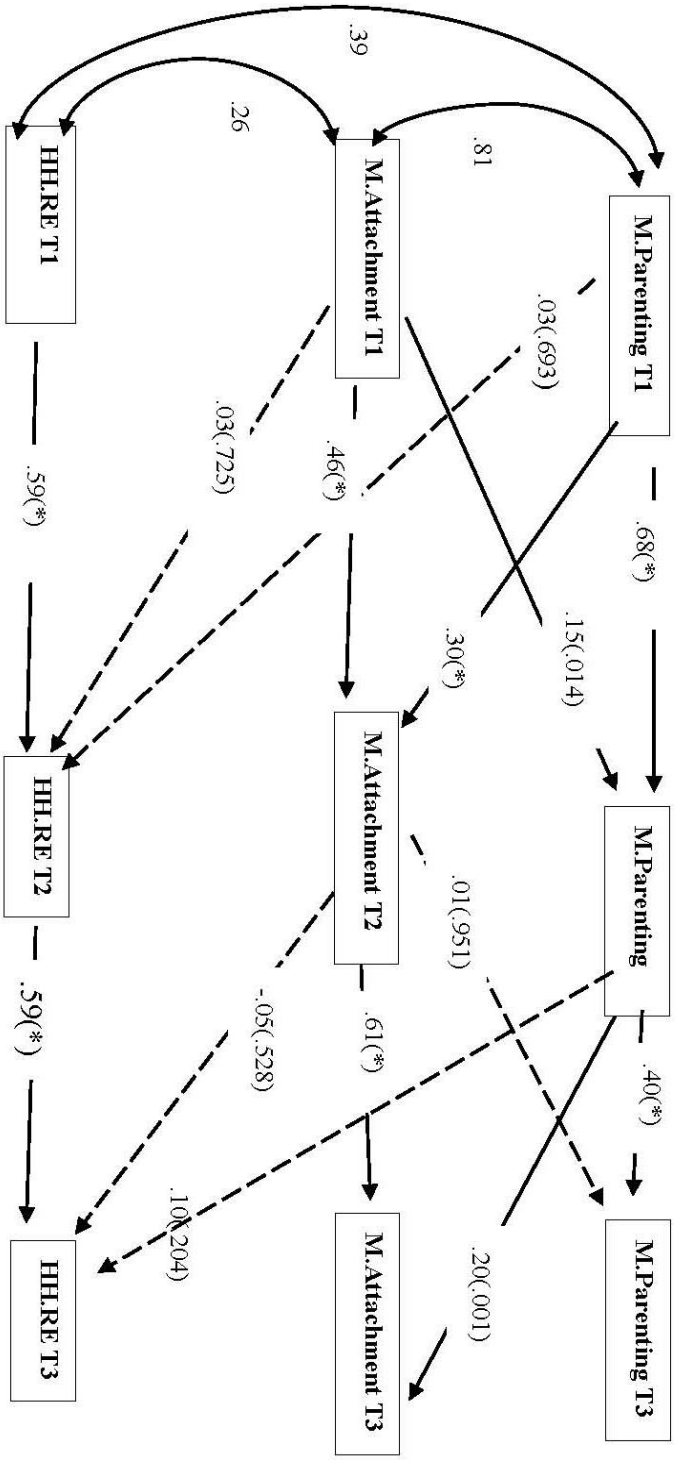

Figure 17. *Cross-lag model predicting health responsibility with mother variables*

Note. For the Time 1 variables, correlations among the variables were presented. For each association, first, standardized regression coefficients, and then *p* values in paratheses were given. * indicates the *p* values less than .001. Nonsignificant paths were shown with dotted lines. HH.RE : Health responsibility . Parenting: Perceived positive maternal parenting. Attachment: Attachment security to mothers.

3.5.3. Health Responsibility Cross-lagged Analyses – Father Model

To test the continuity (Hypothesis 1), cross-lag (Hypothesis 2), and predictive roles (Hypothesis 3) hypotheses with mother-related predictors and health responsibility scores of adolescents across three time points, a cross-lagged analysis was run. Since the RMSEA exceeded the critical value of .08, and , $\chi 2$ /DF ratio exceeded critical value of 5.00, the cross-lag model showed poor fit with the data ($\chi 2$ = 87.749, DF = 13, $\chi 2$ /DF = 6.750, $p < .001$, NFI = .961, CFI = .966, RMSEA = .133 [CI: .108; .161], N =324). Figure 18 showed the standardized regression coefficients and p values for these coefficients among the variables.

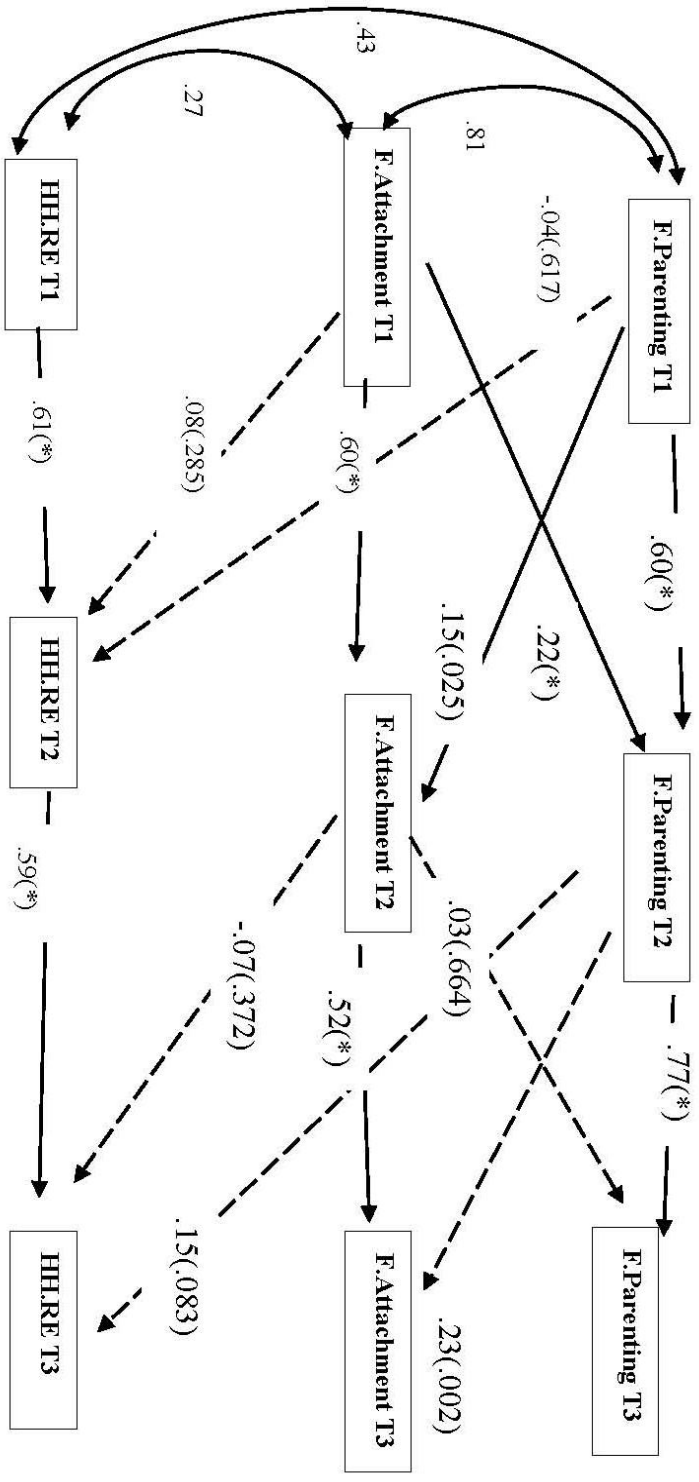

Figure 18. *Cross-lag model predicting health responsibility with father variables*

Note. For the Time 1 variables, correlations among the variables were presented. For each association, first, standardized regression coefficients, and then *p* values in paratheses were given. * indicates the *p* values less than .001. Nonsignificant paths were shown with dotted lines. HH.RE : Health responsibility. Parenting: Perceived positive paternal parenting. Attachment: Attachment security to fathers.

3.5.4. Health Responsibility Longitidunal Moderated-mediation Analyses – Mother Model

To test the moderation (Hypothesis 4) and moderated mediation (Hypothesis 5) hypotheses with mother-related predictors and the health responsibility scores at T3, a moderated mediation analysis (Hayes, 2015, Model 7) was carried out (N = 285, See Figure 19).

In *path a*, perceived maternal parenting in T1 was positively and significantly associated with attachment to mother in T2 (Unstandardized B = .510, SE = .041, t = 12.313, p < .001, 95% CI[.428; .591]). However, neither negative affectivity at T1 (Unstandardized B = .007, SE = .037, t = .189, p = .851, 95% CI[-.067; .081]), nor the interaction of negative affect T1 and perceived maternal parenting T1 (Unstandardized B = .027, SE = .048, t = .572, p = .568, 95% CI[-.067; .122]) were not associated with attachment to mother at T2. Since there was zero within confidence intervals (CI) of the interaction term, the negative affectivity did not moderate the relationship between perceived maternal parenting T1 and attachment to mother in T2. The control variables age (Unstandardized B = -.003, SE = .012, t = -.266, p = .790, 95% CI[-.026; .020]) and gender (Unstandardized B = .040, SE = .048, t = .831, p = .407, 95% CI[-.055; .135]) were not associated with attachment to mother at T2.

For the *path b*, attachment to mother at T2 (Unstandardized B = -.020, SE = .106, t = -.190, p = .850, 95% CI[-.230; .189]) was not associated with health responsibility at T3. The index of moderated mediation was not significant (Unstandardized estimate = -.001, SE = .008, 95% CI[-.021; .013]). In other words, the moderated mediation model was not supported. Although *c path*, the association between perceived maternal parenting at T1 and health responsibility at T3, was significant (Unstandardized B = .306, SE = .086, t = 3.547, p < .001, 95% CI[.136; .476]), since the path b was not significant, there was no indication of mediation, as well. The control variables, age (Unstandardized B = -.015, SE = .021, t = -.718, p = .474, 95% CI[-.056; .026]) and gender (Unstandardized B = .066, SE = .085, t = .777, p = .438, 95% CI[-.101; .234]) of the adolescents did not explain significant variance in predicting health responsibility at T3.

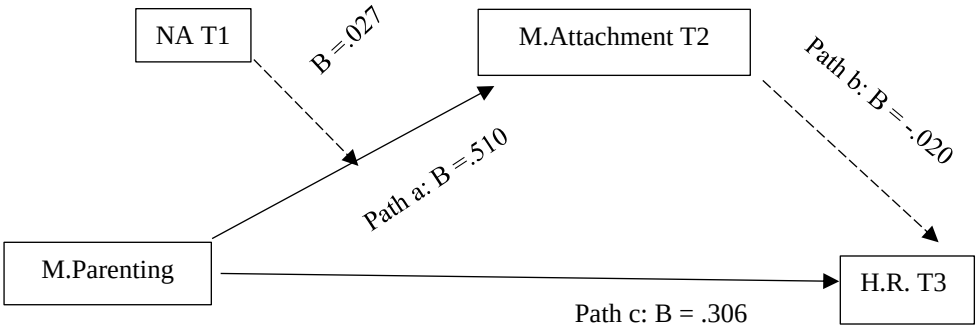

Figure 19. *Moderated mediation model (Model 7) predicting health responsibility with mother variables*

Note. The unstandardized B values were presented for a, b, and paths on the figure. M.: Mother, NA: Negative affect, H.R. Health Responsibility. Dotted lines indicate nonsignificant paths.

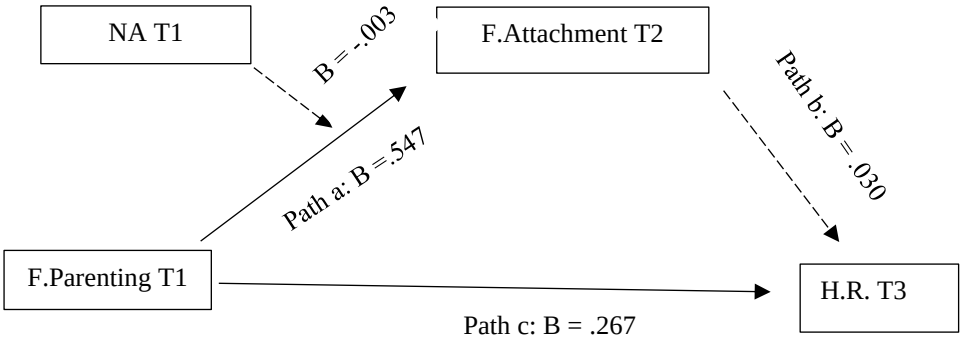

Figure 20. *Moderated mediation model (Model 7) predicting health responsibility with father variables*

Note. The unstandardized B values were presented for a, b, and paths on the figure. NA: Negative affect, F.:Father, H.R. Health Responsibility. Dotted lines indicate nonsignificant paths.

3.5.5. Health Responsibility Longitidunal Moderated-mediation Analyses – Father Model

To test the moderation (Hypothesis 4) and moderated mediation (Hypothesis 5) hypotheses with father-related predictors and the health responsibility scores in T3, a moderated mediation analysis (Hayes, 2015, Model 7) was carried out (N = 287, See Figure 20).

In *path a*, perceived paternal parenting at T1 was positively and significantly associated with attachment to father in T2 (Unstandardized B = .547, SE = .048, t = 11.403, p < .001, 95% CI[.452; .641]). However, neither negative affect at T1 (Unstandardized B = .079, SE = .047, t = 1.685, p = .093, 95% CI[-.013; .171]), nor the interaction of negative affect T1 and perceived paternal parenting T1 (Unstandardized B = -.003, SE = .056, t = -.051, p = .959, 95% CI[-.113; .107]) were not associated with attachment to father in T2. Since there was zero within confidence intervals (CI) of the interaction term, the negative affect did not moderate the relationship between perceived paternal parenting T1 and attachment to father at T2. The control variables age (Unstandardized B = -.013, SE = .015, t = -.869, p = .385, 95% CI[-.042; .016]) and gender (Unstandardized B = .050, SE = .059, t = .848, p = .397, 95% CI[-.066; .165]) were not associated with attachment to father at T2.

For the *path b*, attachment to father at T2 (Unstandardized B = .030, SE = .086, t = .353, p = .724, 95% CI[-.138; .199]) was not associated with health responsibility at T3. Neither age (Unstandardized B = -.008, SE = .021, t = -.386, p = .700, 95% CI[-.050; .034]), nor gender (Unstandardized B = .066, SE = .085, t = .779, p = .437, 95% CI[-.101; .233]) of the adolescents were significantly associated with the health responsibility scores at T3. Although, *path c*, the association between perceived paternal parenting at T1 and health responsibility at T3 was significant (Unstandardized B = .267, SE = .077, t = 3.462, p = .001, 95% CI[.115; .418]), since the path b was not significant, neither moderated mediation, not the mediation models were not supported.

3.6. Predicting Healthy Diet

3.6.1. Correlations between Healthy Diet and Study Variables

The bivariate correlations between psychological well-being and other study variables were shown in Table 7.

Table 7. *Correlations between Diet and Predictors*

Variables	1.Diet T1	2.Diet T2	3.Diet T3
1.Diet T1	1.00		
2.Diet T2	.62**	1.00	
3.Diet T3	.55**	.70**	1.00
4.Attachment – M.T1	.15**	.22**	.09
5.Attachment – M.T2	.13**	.27**	.15*
6.Atttachment – M.T3	.12*	.25**	.20**
7.Atttachment – F.T1	.24**	.26**	.20**
8.Attachment – F.T2	.20**	.28**	.20**
9.Attachment – F.T3	.14*	.24**	.28**
10.Negative Affect T1	-.16**	-.10*	-.03
11.P.Parenting – M.T1	.28**	.31**	.23**
12.P.Parenting. – M.T2	.20**	.35**	.18**
13.P.Parenting. – M.T3	.15**	.17**	.21**
14.P.Parenting. – F.T1	.36**	.31**	.25**
15.P.Parenting – F.T2	.29**	.38**	.26**
16.P.Parenting – F.T3	.23**	.30**	.34**
17.Age-T1	-.28**	-.27**	-.34**
18.Gender	-.08*	-.03	-.01

M.: Mother, F.: Father, P.: Perceived, Gender – Boys: 0, Girls: 1, *p < .05, **p < .01

3.6.2 Healthy Diet Cross-lagged Analyses – Mother Model

To test the continuity (Hypothesis 1), cross-lag (Hypothesis 2), and predictive roles (Hypothesis 3) hypotheses with mother-related predictors and diet scores of adolescents across three time points, a cross-lagged analysis was run. The model showed good fit with the data ($\chi2$ = 31.538, DF = 13, $\chi2$ /DF = 2.426, p = .003, NFI = .982, CFI = .989, RMSEA = .066 [CI: .037; .096], N =324). Figure 21 showed the standardized regression coefficients and p values for these coefficients among the variables.

Like in previous analyses, perceived maternal parenting (T1→T2: β = .675, Unstandardized B = .659, S.E. = .058, t = 11.374, p < .001, T2→T3: β = .412, Unstandardized B = .249, S.E. = .054, t = 4.642, p < .001), attachment to mother (T1→T2: β = .464, Unstandardized B = .450, S.E. = .067, t = 6.744, p < .001, T2→T3: β = .603, Unstandardized B = .621, S.E. = .064, t = 9.717, p < .001), and diet scores (T1→T2: β = .548, Unstandardized B = .526, S.E. = .046, t = 11.530, p < .001, T2→T3: β = .680, Unstandardized B = .695, S.E. = .046, t = 15.253, p < .001)showed continuity across three time points.

The results showed that, perceived maternal parenting in T1 was significantly associated both with attachment to mothers in T2 (β = .296, Unstandardized B = .237, S.E. = .055, t = 4.312, p < .001) and with diet scores in T2 (β = .174, Unstandardized B = .136, S.E. = .065, t = 2.103, p = .035). Attachment to mother in T1 was linked to perceived parenting in T2 (β = .150, Unstandardized B = .178, S.E. = .071, t = 2.518, p = .012) , but not significantly related to diet scores in T2 (β = -.042, Unstandardized B = -.040, S.E. = .076, t = -.521, p = .602). Perceived maternal parenting in T2 was significantly associated with attachment to mothers in T3 (β = .205, Unstandardized B = .173, S.E. = .052, t = 3.304, p < .001), but not linked to diet scores in T3 (β = -.023, Unstandardized B = -.019, S.E. = .061, t = -.305, p = .760). Attachment to mother in T2 was associated neither with perceived maternal parenting in T3 (β = -.004, Unstandardized B = -.003, S.E. = .066, t = -.041, p = .967), nor with diet scores in T3 (β = -.020, Unstandardized B = -.020, S.E. = .073, t = -.277, p = .782).

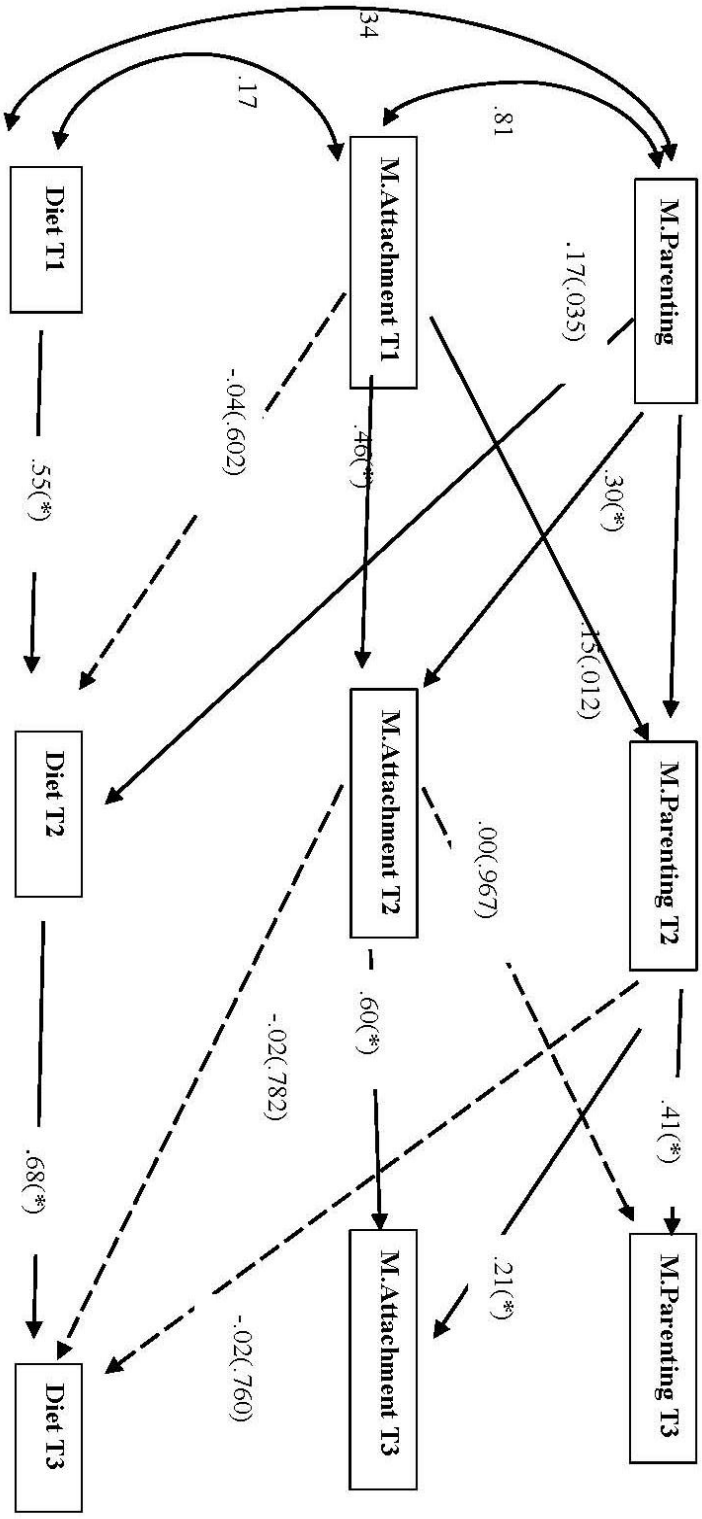

Figure 21. *Cross-lag model predicting diet with mother variables*

Note. For the Time 1 variables, correlations among the variables were presented. For each association, first, standardized regression coefficients, and then *p* values in paratheses were given. * indicates the *p* values less than .001. Nonsignificant paths were shown with dotted lines. Parenting: Perceived positive maternal parenting. Attachment: Attachment security to mothers.

3.6.3. Healthy Diet Cross-lagged Analyses – Father Model

To test the continuity (Hypothesis 1), cross-lag (Hypothesis 2), and predictive roles (Hypothesis 3) hypotheses with father-related predictors and diet scores of adolescents across three time points, a cross-lagged analysis was run. Since the RMSEA exceeded the crital value of .08, the model showed poor fit with the data ($\chi 2$ = 60.397, DF = 13, $\chi 2$ /DF = 4.646, p = .001, NFI = .973, CFI = .978, RMSEA = .106 [CI: .080; .134], N =324). Figure 22 showed the standardized regression coefficients and p values for these coefficients among the variables.

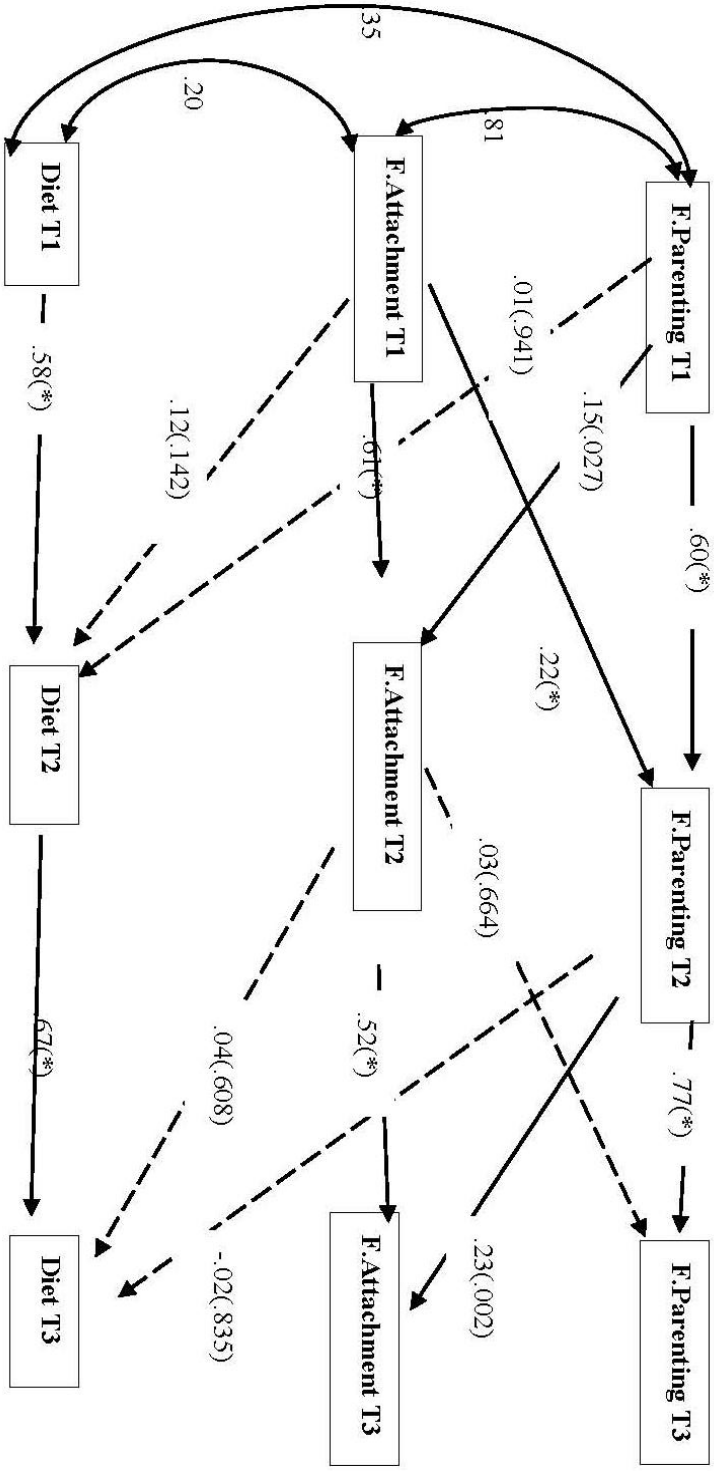

Figure 22. *Cross-lag model predicting diet with father variables*

Note. For the Time 1 variables, correlations among the variables were presented. For each association, first, standardized regression coefficients, and then *p* values in paratheses were given. * indicates the *p* values less than .001. Nonsignificant paths were shown with dotted lines. Parenting: Perceived positive paternal parenting. Attachment: Attachment security to fathers

3.6.4. Healthy Diet Longitidunal Moderated-mediation analyses – Mother Model

To test the moderation (Hypothesis 4) and moderated mediation (Hypothesis 5) hypotheses with mother-related predictors and diet scores in T3, a moderated mediation analysis (Hayes, 2015, Model 7) was carried out (N = 285, See Figure 23).

In *path a*, perceived maternal parenting in T1 was positively and significantly associated with attachment to mother in T2 (Unstandardized B = .510, SE = .041, t = 12.313, p < .001, 95% CI[.428; .591]). However, neither negative affect at T1 (Unstandardized B = .007, SE = .037, t = .189, p = .851, 95% CI[-.067; .081]), nor the interaction of negative affect T1 and perceived maternal parenting T1 (Unstandardized B = .027, SE = .048, t = .572, p = .568, 95% CI[-.067; .122]) were not associated with attachment to mother at T2. Since there was zero within confidence intervals (CI) of the interaction term, the negative affect did not moderate the relationship between perceived maternal parenting T1 and attachment to mother in T2. The control variables age (Unstandardized B = -.003, SE = .012, t = -.266, p = .790, 95% CI[-.026; .020]) and gender (Unstandardized B = .040, SE = .048, t = .831, p = .407, 95% CI[-.055; .135]) were not associated with attachment to mother at T2.

For the *path b*, attachment to mother at T2 (Unstandardized B = -.005, SE = .077, t = -.065, p = .948, 95% CI[-.157; .147]) was not associated with diet scores at T3. For *path c*, the association tetween perceived maternal parenting at T1 and diet at T3 was not significant (Unstandardized B = .098, SE = .063, t = 1.561, p = .120, 95% CI[-.026; .221]). Among control variables, age was negative associated with diet scores at T3 (Unstandardized B = -.079 SE = .015, t = -5.273, p < .001, 95% CI[-.109; -.050]), whereas gender was not significantly associated with diet T3 scores (Unstandardized B = .000, SE = .062, t = .000, p = 1.000, 95% CI[-.122; .122]). All in all, since both b and c paths were nonsignificant, neither moderated mediation not the mediation models were supported.

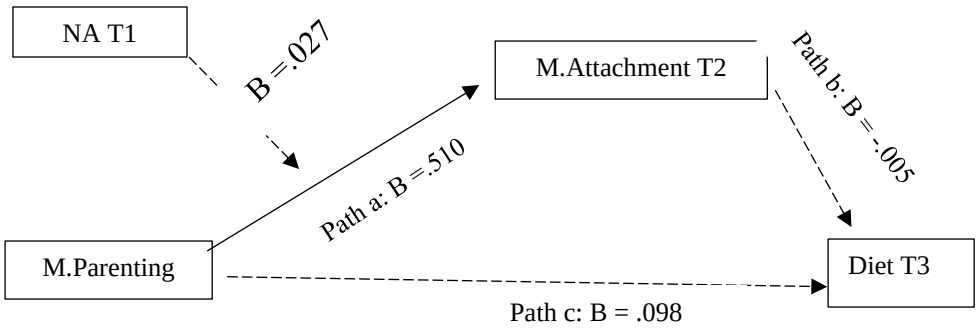

Figure 23. *Moderated mediation model (Model 7) predicting diet with mother variables*

Note. The unstandardized B values were presented for a, b, and paths on the figure. M.: Mother, NA: Negative affect. Dotted lines indicate nonsignificant paths.

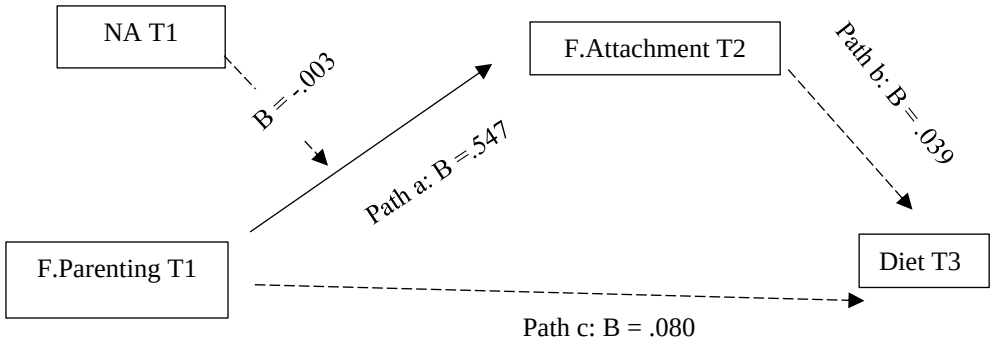

Figure 24. *Moderated mediation model (Model 7) predicting diet with father variables*

Note. The unstandardized B values were presented for a, b, and paths on the figure. NA: Negative affect, F.:Father. Dotted lines indicate nonsignificant paths.

3.6.5. Healthy Diet Longitidunal Moderated-mediation Analyses – Father Model

To test the moderation (Hypothesis 4) and moderated mediation (Hypothesis 5) hypotheses with father-related predictors and the diet scores at T3, a moderated mediation analysis (Hayes, 2015, Model 7) was carried out (*N* = 287, See Figure 24).

In *path a*, perceived paternal parenting at T1 was positively and significantly associated with attachment to father in T2 (Unstandardized *B* = .547, *SE* = .048, *t* = 11.403, *p* < .001, 95% CI[.452; .641]). However, neither negative affect at T1 (Unstandardized *B* = .079, *SE* = .047, *t* = 1.685, *p* = .093, 95% CI[-.013; .171]), nor the interaction of negative affect T1 and perceived paternal parenting T1 (Unstandardized *B* = -.003, *SE* = .056, *t* = -.051, *p* = .959, 95% CI[-.113; .107]) were not associated with attachment to father in T2. Since there was zero within confidence intervals (CI) of the interaction term, the negative affect did not moderate the relationship between perceived paternal parenting T1 and attachment to father at T2. The control variables age (Unstandardized *B* = -.013, *SE* = .015, *t* = -.869, *p* = .385, 95% CI[-.042; .016]) and gender (Unstandardized *B* = .050, *SE* = .059, *t* = .848, *p* = .397, 95% CI[-.066; .165]) were not associated with attachment to father at T2.

For the *path b*, attachment to father at T2 (Unstandardized *B* = .039, *SE* = .062, *t* = .630, *p* = .529, 95% CI[-.083; .162]) was not associated with diet scores at T3. *Path c*, the perceived paternal parenting T1 – diet T3 link was not significant, as well (Unstandardized *B* = .080, *SE* = .056, *t* = 1.436, *p* = .152, 95% CI[-.030; .191]). Likewise in the models with mother-related predictors, both moderated mediation and mediation models with father-related predictors were not supported.

3.7. Predicting Stress Management

3.7.1. Correlations between Stress Management and Study Variables

The bivariate correlations between psychological well-being and other study variables were shown in Table 8.

Table 8. *Correlations between stress management and predictors*

Variables	1.Stress Management T1	2.Stress Management T2	3.Stress Management T3
1.Stress management T1	1.00		
2.Stress management T2	.62**	1.00	
3.Stress management T3	.49**	.61**	1.00
4.Att – M.T1	.29**	.21**	.23**
5.Att – M.T2	.26**	.32**	.30**
6.Att – M.T3	.27**	.31**	.34**
7.Att – F.T1	.36**	.29**	.28**
8.Att – F.T2	.30**	.35**	.35**
9.Att – F.T3	.26**	.33**	.40**
10.Neg.Aff. T1	-.24**	-.16**	-.05
11.Par.– M.T1	.42**	.33**	.32**
12.Par. – M.T2	.34**	.41**	.33**
13.Par. – M.T3	.19**	.21**	.20**
14.Par. – F.T1	.46**	.37**	.34**
15.Par. – F.T2	.38**	.46**	.39**
16.Par. – F.T3	.37**	.41**	.47**
17.Age-T1	-.43**	-.33**	-.42**
18.Gender	-.04	-.06	-.07

M.: Mother, F.: Father, P.: Perceived, Gender – Boys: 0, Girls: 1, *p < .05, **p < .01

3.7.2 Stress Management Cross-lagged Analyses – Mother Model

To test the continuity (Hypothesis 1), cross-lag (Hypothesis 2), and predictive roles (Hypothesis 3) hypotheses with mother-related predictors and stress management scores of adolescents across three time points, a cross-lagged analysis was run. The model showed good fit with the data ($\chi2$ = 20.763, DF = 13, $\chi2$ /DF = 1.597, p = .078, NFI = .988, CFI = .995, RMSEA = .043 [CI: .000; .076], N =324). Figure 25 showed the standardized regression coefficients and p values for these coefficients among the variables.

Like in previous analyses, perceived maternal parenting (T1→T2: β = .674, Unstandardized B = .656, S.E. = .058, t = 11.312, p < .001, T2→T3: β = .409, Unstandardized B = .247, S.E. = .054, t = 4.606, p < .001), attachment to mother (T1→T2: β = .464, Unstandardized B = .449, S.E. = .067, t = 6.714, p < .001, T2→T3: β = .605, Unstandardized B = .623, S.E. = .064, t = 9.751, p < .001), and stress management scores (T1→T2: β = .530, Unstandardized B = .485, S.E. = .048, t = 10.210, p < .001, T2→T3: β = .566, Unstandardized B = .615, S.E. = .053, t = 11.675, p < .001) showed continuity across three time points. The results showed that, perceived maternal parenting in T1 was significantly associated both with attachment to mothers in T2 (β = .294, Unstandardized B = .235, S.E. = .055, t = 4.275, p < .001), and with stress management scores in T2 (β = .205, Unstandardized B = .179, S.E. = .076, t = 2.346, p = .019). Attachment to mother in T1 was linked to perceived parenting in T2 (β = .152, Unstandardized B = .179, S.E. = .071, t = 2.533, p = .011) but not significantly related to stress management scores in T2 (β = -.137, Unstandardized B = -.145, S.E. = .086, t = -1.684, p = .092). Perceived maternal parenting in T2 was significantly associated with attachment to mothers in T3 (β = .204, Unstandardized B = .172, S.E. = .052, t = 3.288, p = .001), but not linked to stress management scores in T3 (β = .020, Unstandardized B = .019, S.E. = .078, t = .245, p = .806). Attachment to mother in T2 was associated neither with perceived maternal parenting in T3 (β = .000, Unstandardized B = .000, S.E. = .066, t = .000, p = 1.000), nor with stress management scores in T3 (β = .089, Unstandardized B = .106, S.E. = .093, t = 1.144, p = .253).

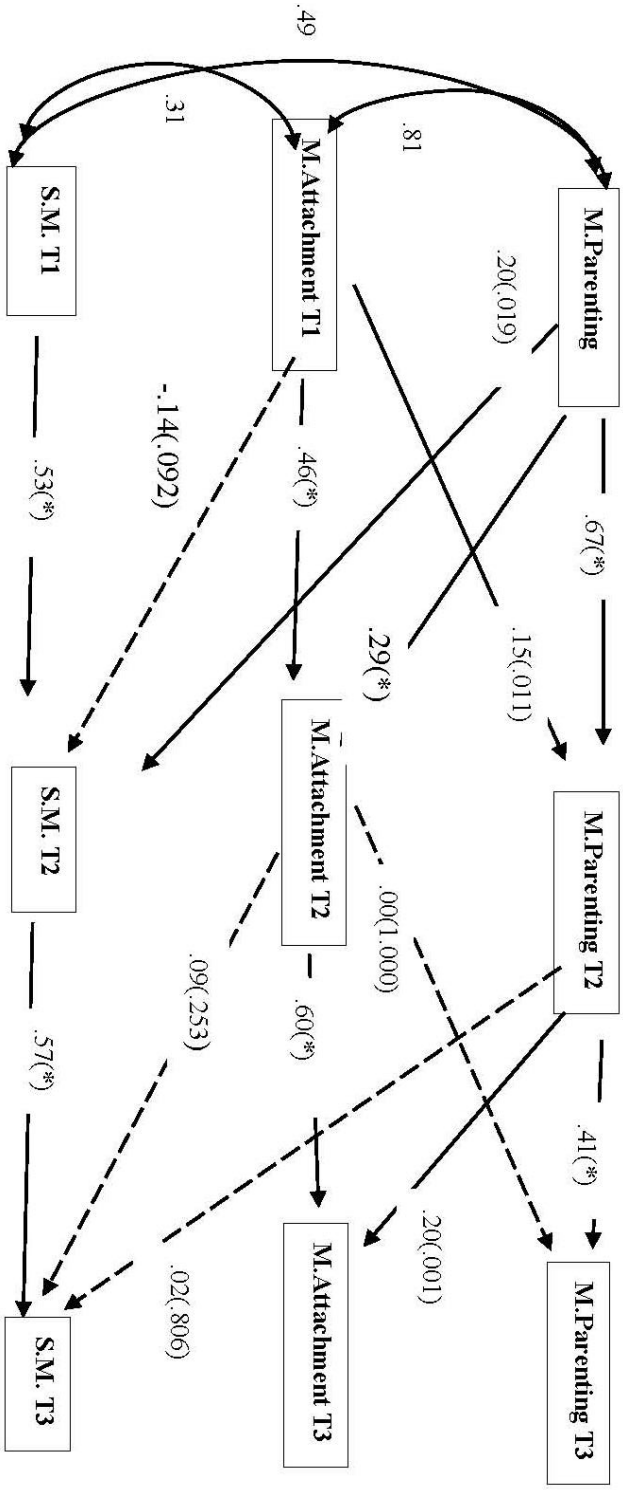

Figure 25. *Cross-lag model predicting stress management with mother variables*

Note. For the Time 1 variables, correlations among the variables were presented. For each association, first, standardized regression coefficients, and then *p* values in paratheses were given. * indicates the *p* values less than .001. Nonsignificant paths were shown with dotted lines. S.M. : Stress management. Parenting: Perceived positive maternal parenting. Attachment: Attachment security to mother

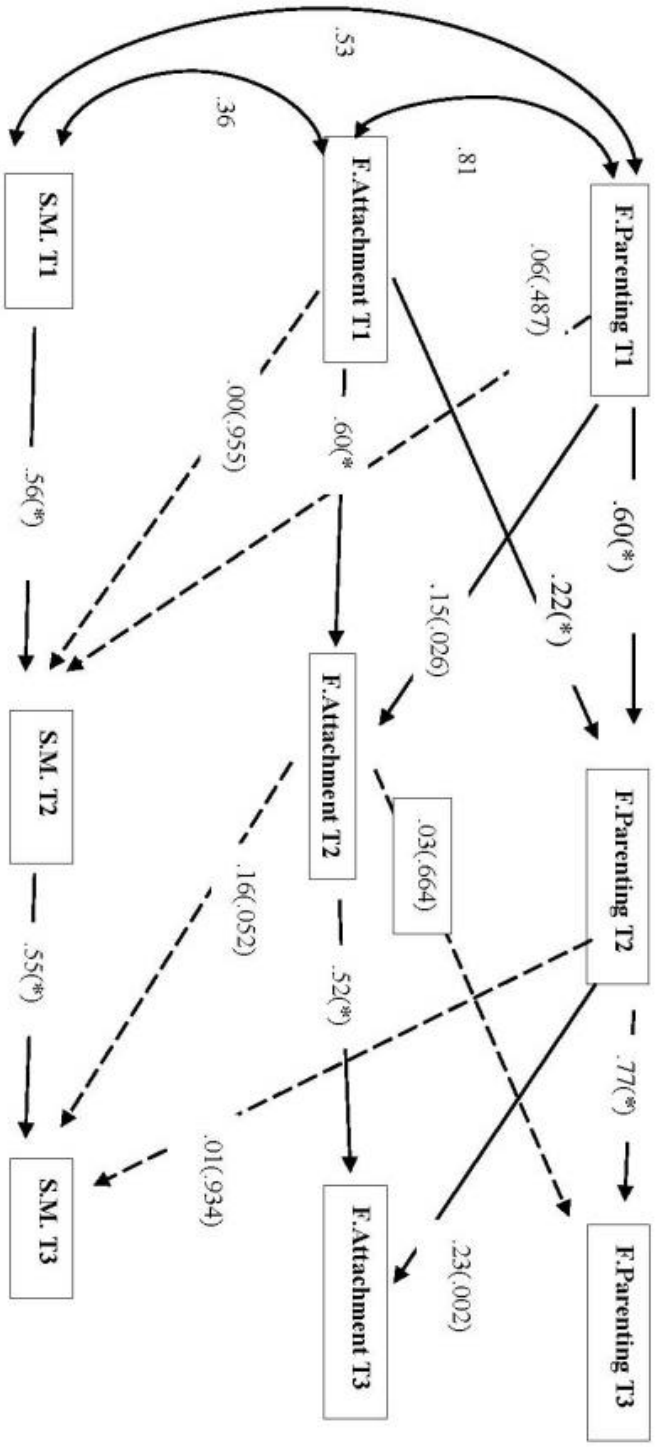

Figure 26. *Cross-lag model predicting stress management with father variables*

Note. For the Time 1 variables, correlations among the variables were presented. For each association, first, standardized regression coefficients, and then *p* values in paratheses were given. * indicates the *p* values less than .001. Nonsignificant paths were shown with dotted lines. S.M. : Stress management. Parenting: Perceived positive paternal parenting. Attachment: Attachment security to fathers.

3.7.3. Stress Management Cross-lagged Analyses – Father Model

To test the continuity (Hypothesis 1), cross-lag (Hypothesis 2), and predictive roles (Hypothesis 3) hypotheses with father-related predictors and stress management scores of adolescents across three time points, a cross-lagged analysis was run. Since the RMSEA exceeded the critical value of .08, the model showed poor fit with the data ($\chi 2$ = 60.397, DF = 13, $\chi 2$ /DF = 4.646, p = .001, NFI = .973, CFI = .978, RMSEA = .106 [CI: .080; .134], N =324). Figure 26 showed the standardized regression coefficients and p values for these coefficients among the variables.

3.7.4. Stress Management Longitidunal Moderated-mediation Analyses – Mother Model

To test the moderation (Hypothesis 4) and moderated mediation (Hypothesis 5) hypotheses with mother-related predictors and the stress management scores at T3, a moderated mediation analysis (Hayes, 2015, Model 7) was carried out (N = 285, See Figure 27).

In *path a*, perceived maternal parenting in T1 was positively and significantly associated with attachment to mother in T2 (Unstandardized B = .510, SE = .041, t = 12.313, p < .001, 95% CI[.428; .591]). However, neither negative affect at T1 (Unstandardized B = .007, SE = .037, t = .189, p = .851, 95% CI[-.067; .081]), nor the interaction of negative affect T1 and perceived maternal parenting T1 (Unstandardized B = .027, SE = .048, t = .572, p = .568, 95% CI[-.067; .122]) were not associated with attachment to mother at T2. Since there was zero within confidence intervals (CI) of the interaction term, the negative affect did not moderate the relationship between perceived maternal parenting T1 and attachment to mother in T2. The control variables age (Unstandardized B = -.003, SE = .012, t = -.266, p = .790, 95% CI[-.026; .020]) and gender (Unstandardized B = .040, SE = .048, t = .831, p = .407, 95% CI[-.055; .135]) were not associated with attachment to mother at T2.

For the *path b*, attachment to mother at T2 (Unstandardized *B* = .107, *SE* = .087, *t* = 1.240, *p* = .216, 95% CI[-.063; .278]) was not associated with stress management at T3. Although *c path*, the association between perceived maternal parenting at T1 and stress management at T3, was significant (Unstandardized *B* = .201, *SE* = .070, *t* = 2.868, *p* = .004, 95% CI[.063; .340]), since the path b was not significant, neither moderated mediation nor the mediation model was supported.

Adolescents' age (Unstandardized *B* = -.107, *SE* = .017, *t* = -6.326, *p* < .001, 95% CI[-.140; -.073]) was negative associated with stress management, while gender (Unstandardized *B* = -.057, *SE* = .069, *t* = -.823, *p* = .411, 95% CI[-.193; .079]) of the adolescents did not explain significant variance.

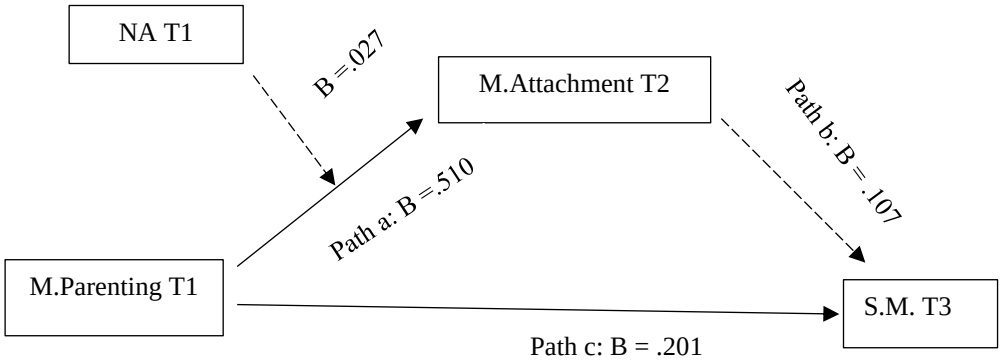

Figure 27. *Moderated mediation model (Model 7) predicting stress management with mother variables*

Note. The unstandardized B values were presented for a, b, and paths on the figure. M.: Mother, NA: Negative affect, S.M. Stress Management. Dotted lines indicate nonsignificant paths.

3.7.5. Stress Management Longitidunal Moderated-mediation Analyses – Father Model

To test the moderation (Hypothesis 4) and moderated mediation (Hypothesis 5) hypotheses with father-related predictors and the stress management scores at T3, a moderated mediation analysis (Hayes, 2015, Model 7) was carried out (*N* = 287, See Figure 28).

In *path a*, perceived paternal parenting at T1 was positively and significantly associated with attachment to father in T2 (Uns. *B* = .547, *SE* = .048, *t* = 11.403, *p* < .001, 95% CI[.452; .641]). However, neither negative affect at T1 (Uns. *B* = .079, *SE* = .047, *t* = 1.685, *p* = .093, 95% CI[-.013; .171]), nor the interaction of negative affect T1 and perceived paternal parenting T1 (Uns. *B* = -.003, *SE* = .056, *t* = -.051, *p* = .959, 95% CI[-.113; .107]) were not associated with attachment to father in T2. Since there was zero within confidence intervals (CI) of the interaction term, the negative affect did not moderate the relationship between perceived paternal parenting T1 and attachment to father at T2. The control variables age (Uns. *B* = -.013, *SE* = .015, *t* = -.869, *p* = .385, 95% CI[-.042; .016]) and gender (Uns. *B* = .050, *SE* = .059, *t* = .848, *p* = .397, 95% CI[-.066; .165]) were not associated with attachment to father at T2.

For the *path b*, attachment to father in T2 (Uns. *B* = .184, *SE* = .070, *t* = 2,636, *p* = .009, 95% CI[.047; .322]) was positively and significantly linked to stress management in T3. Yet, the index of moderated mediation was not significant (Unstandardized estimate = -.001, *SE* = .013, 95% CI[-.030; .023]). In other words, the moderated mediation model was not supported.

Since the moderated mediation model was not supported, the predictor role of perceived paternal parenting on stress management at T3 via attachment to father at T2 was tested with a simple mediation model (PROCESS Model 4, Hayes, 2013). This mediation model explained approximately 51 % of the variance in psychological well-being at T3 (R^2 = .508 F(4,282) = 24.523, p < .001, See Figure 29). Adolescents' age was negatively associated with stress management at T3 (Uns. *B* = -.101, *SE* = .017, *t* = -5.844, *p* < .001, 95% CI[-.136; -.067]), whereas gender did not explain significant variance in stress management at T3 (Uns. *B* = -.063, *SE* = .069, *t* = -.911, *p* = .363, 95% CI[-.199; .073]).

Perceived paternal parenting was significantly associated with attachment to father at T2 (Uns. *B* = .523, *SE* = .044, *t* = 12,003, *p* < .001, 95% CI[.437; .608]), which, in turn, was associated with stress management scores at T3 (Uns. *B* = .184, *SE* = .070, *t* = 2,636, *p* = .009, 95% CI[.047; .322]). The direct link between perceived paternal parenting at T1 and stress management at T3 was no

significant (Uns. *B* = .118, *SE* = .063, *t* = 1,872, *p* = .062, 95% CI[-.006; .241]). These findings suggested a full mediation between perceived paternal parenting at T1 and stress management at T3, through attachment to father at T2.

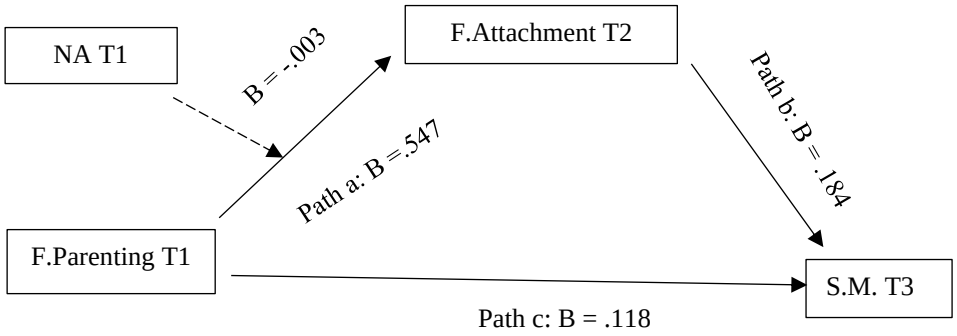

Figure 28. *Moderated mediation model (Model 7) predicting stress management with father variables*

Note. The unstandardized B values were presented for a, b, and paths on the figure. NA: Negative affect, F.:Father, S.M. Stress Management. Dotted lines indicate nonsignificant paths.

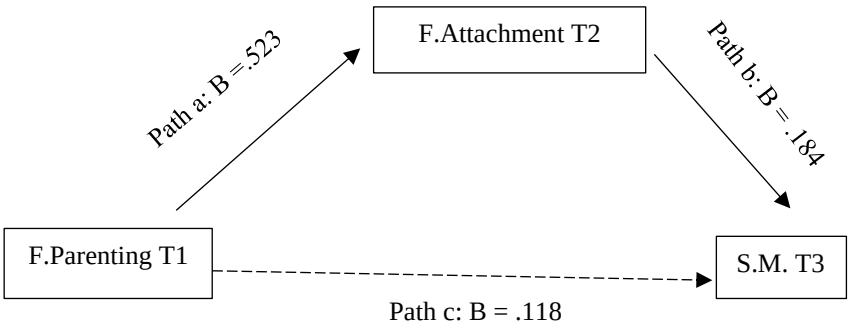

Figure 29. *Mediation model (Model 4) predicting stress management with father variables*

Note. The figure presented the unstandardized B values for a, b, and paths. NA: Negative affect, F.:Father, S.M. Stress Management. Dotted lines indicate nonsignificant paths.

3.8. Summary of the Findings

*Hypothesis 1, continuity hypothesis, was supported for positive parenting and attachment security, for mothers and fathers, respectively.

*Hypothesis 2, cross-lag hypothesis, was partially supported.

The paths from positive parenting in T1 to attachmment security in T2, and the paths from attachment security in T1 to positive parenting in T2 were significant for mothers, and fathers, respectively.

The paths from positive parenting in T2 to attachmment security in T3 were also significant for mothers, and fathers, respectively. However, the paths from attachment security in T2 to positive parenting in T3 were significant neither for mothers, not for fathers.

*Hypothesis 3, predictive roles hypothesis, was partially supported.

Outcome-1: Psychological Well-being: The psychological well-being was significantly and positively associated with positive parenting, and attachment security, for mother, and father-related variables at Time 1. Psychological well-being in T2 was positively predicted by maternal positive parenting in T1 and by attachment security to fathers in T1. However, attachment security to mothers in T1 and paternal positive parenting in T1 did not predict psychological well-being in T2. For the psychological well-being in T3, neither mother-, nor father-related predictors at T2 had predictive roles.

Outcome-2: Subjective Well-being: The subjective well-being in T1 was significantly and positively associated with positive parenting in T1, and attachment security in T1, for mother-, and father-related variables. Subjective well-being in T2 was only predicted by maternal positive parenting in T1. Neither mother-, not father-related variables in T2 were associated with subjective well-being scores in T3.

Outcome-3: Physical activity: The physical activity scores was significantly and positively associated with mother-, and father-related variables in T1. Neither mother-, not father-related variables in T1 were associated with physical activity scores in T2. For the physical activity scores in T3, neither mother-, not father-related variables in T2 had significant predictive roles.

Outcome-4: Health responsibility: The health responsibility scores was significantly and positively associated with mother-, and father-related variables at T1. Neither mother-, not father-related variables in T1 were associated with health responsibility scores at T2. For the health responsibility scores in T3, neither mother-, not father-related variables in T2 had significant predictive roles.

Outcome-5: Healthy diet: The healthy diet score was significantly and positively associated with positive parenting, and attachment security, for mother-, and father-related variables at T1. Diet scores in T2 was only predicted by maternal positive parenting in T1. Neither mother-, not father-related variables in T2 were associated with diet scores in T3.

Outcome-6: Stress management: The stress management scores was significantly and positively associated with positive parenting, and attachment security, for mother-, and father-related variables at T1. Stress management scores in T2 was only predicted by maternal positive parenting in T1. Neither mother-, not father-related variables in T2 were associated with stress management scores in T3.

*Hypothesis 4, moderation hypothesis, was not supported. In other words, negative affectivity scores did not moderate the association between positive parenting in T1 and attachment security in T2, for mothers, and fathers, respectively.

*Hypothesis 5, moderated mediation hypothesis, was not supported. However, the mediational paths were partially supported.

Outcome-1:Psychological Well-being in T3: Perceived positive parenting in T1 was positively associated with attachment security at T2, which, in turn, was also positively linked to psychological well-being at T3, for mother-, and father-related variables, respectively (Partial mediation).

Outcome-2: Subjective Well-being in T3: Perceived positive parenting was positively associated with attachment security at T2, which, in turn, was also positively linked to subjective well-being at T3, for mothers (full mediation) and fathers (partial mediation), respectively.

Outcome-3: Physical activity in T3: Mediational paths for mother-, and father-related variables in relation to physical activity scores in T3 were not supported.

Outcome-4: Health responsibility in T3: Mediational paths for mother-, and father-related variables in relation to health responsibility scores in T3 were not supported.

Outcome-5: Diet scores in T3: Mediational paths for mother-, and father-related variables in relation to diet scores in T3 were not supported.

Outcome-6: Stress management in T3: Maternal positive parenting in T1 predicted attachment security to mother in T2, however, the attachment security to mother did not predict stress management scores in T3. Paternal positive parenting in T1 was significantly associated with attachment to father at T2, which, in turn, was associated with stress management scores at T3 (Full mediation).

CHAPTER 4

DISCUSSION

In this chapter, the findings of each outcome are discussed in regard to existing literature. The discussion of the findings are summarized in relation to well-being and health-promotion behaviors among adolescents. The chapter continues with strengths and implications of the current study. The suggestion were listed for the future studies. The chapter ends with implications and conclusion.

4.1. Discussion of Findings

The current study aimed to explore three main research questions: *i*) How are perceived positive parenting and parental attachment security associated with each other longitudinally among adolescents? *ii*) Does negative affectivity moderate the perceived positive parenting and parental attachment security associations? *iii*) Do perceived positive parenting and parental attachment security have predictive roles for adolescents' well-being and health-promoting behaviors? Concerning these research questions, five hypotheses were formulated. In regard to perceived positive parenting, attachment security, and negative affectivity, three main hypotheses were tested; continuity hypothesis (Hypothesis 1), cross-lag hypothesis (Hypothesis 2), and moderation hypothesis (Hypothesis 4). In regard to outcome variables (psychological well-being, subjective well-being, physical activity, health responsibility, healthy diet, and stress management) two main hypotheses were investigated, namely predictive roles hypothesis (Hypothesis 3) and moderated mediation hypothesis (Hypothesis 5). In the following sections, the hypotheses and current study's findings were discussed in regard to existing literature.

4.1.1. Discussion of the Findings for Perceived Parenting, Attachment Security, and Negative Affectivity

The current study's first hypothesis, the "*continuity hypothesis*," expected that perceived positive parenting and attachment security would show continuity for mothers and fathers, respectively. This hypothesis was tested with cross-lag analyses and supported for mother-, and father-related variables, respectively. In other words, ***attachment security toward mothers and fathers*** showed continuity across three time points for adolescents aged between 11 and 16 years in a Turkish sample. These findings aligned with the previous view that attachment security showed continuity across adolescence (Allen, McElhaney, Kuperminc, & Jodl, 2004; Buist, Reitz, & Dekovic, 2008; Koehn & Kerns, 2018). In other words, the current study contributed to the international psychology literature by supporting the continuity hypothesis of attachment security among adolescents. Compared to earlier developmental phases, attachment needs of adolescents were thought to change form, such as, transition from physical proximity to emotional closeness (Ruhl, Dolan, & Buhrmester, 2015), yet, it continues to hold importance and act as a protective factor for adverse experiences. Adolescents, who experience ups and downs with the developmental changes (Steinberg, 2004), can benefit from the continued attachment security.

The findings of the current study also contributed to the parental attachment literature in Turkish adolescent samples by providing a longitudinal perspective. In the current study, following the Kerns' initial studies (Kerns, Aspelmeier, Gentzler, & Grabill, 2001; Kerns, Klepac, & Cole, 1996; Koehn & Kerns, 2018; Sümer & Anafarta-Şendağ, 2009), attachment security was operationalized as a single factor. As the scales that can measure the secure attachment phenomenon have been diversified, there was a switch from single-factor measures to multi-factor measures as well (Brenning, Soenens, Braet, Bosmans, 2011; Koehn & Kerns, 2018). Following these developments in the measurement of attachment security in the international literature, the future studies can replicate the longitidunal findings of the current study with different

conceptualizations of attachment security during adolescence in the Turkish cultural context (Kirimer, Akça, & Sümer, 2014; Sümer & Kagitcibasi, 2010).

The results of the current study also showed that, compared to mother attachment security, means of father attachment security scores were lower across three time points. These findings were in line with attachment hierarchy perspectives, underlining that mothers are placed in a higher order than fathers for attachment relationships (Kobak, Abbott, Zisk, & Bounoua, 2017; Rosenthhal & Kobak, 2010).

The current study's findings supported the *continuity hypothesis* also for perceived positive parenting. That is to say, in addition to attachment security, ***perceived positive parenting*** also showed continuity across three time points, for mothers and fathers, respectively. These findings are also in line with the previous longitudinal parenting studies from different cultures, such as Pittsburg Youth Study,Oregon Youth Study, Singapore Cohort Study of Risk Factors for Myopia (SCORM), that, positive or negative parent-child interactions held relative stability during the transition from middle childhood to adolescence (Capaldi, Kerr, & Tiberio, 2018; Loeber et al., 2001; Ong et al, 2018).

It was expected that there would be positive ***cross-lagged associations between perceived positive parenting and attachment security*** from Time 1 to Time 2 and from Time 2 to Time 3 for mothers and fathers, respectively. This hypothesis was tested with cross-lag analyses for mothers and fathers, respectively, and it was partially supported.

For mothers, perceived positive parenting was predictive of attachment security from Time 1 to Time 2, and from Time 2 to Time 3, respectively. Attachment security in Time 1 was also a significant positive predictor of perceived positive parenting in Time 2; yet, attachment security in Time 2 was not significantly associated with perceived positive parenting in Time 3. In addition, from Time 1 to Time 2, the association from perceived parenting to attachment security was stronger than the link from attachment security to perceived positive parenting.

For fathers, findings showed similar patters. Perceived positive parenting was positively and significantly linked with attachment security from T1 to T2,

and from T2 to T3, respectively. For the association from T1 to T2, the link from attachment security(T1) to percieved positive parenting(T2) was stronger than the link from perceived positive parenting(T1) to attachment security(T2). On the other hand, attachment security predicted perceived positive parenting only from T1 to T2, but not from T2 to T3.

These findings were partially in line with previous literature, that perceived positive parenting and parental attachment security were positively associated (Koehn & Kerns, 2018). In their meta-analyses, Koehn and Kerns (2018) reported that attachment security – positive parenting associations for mothers yielded stronger effect sizes compared to attachment security – positive parentings associations for fathers. One of the important contributions of the current study was the exploration of the directionality of the association between perceived positive parenting and attachment security. The current study showed that although both concepts were interrelated, the perceived parenting was a stronger predictor of attachment security for mothers, and fathers, respectively. These findings filled one of the gaps in adolescence attachment literature (Koehn & Kerns, 2018).

The associations between attachment security in T2 and perceived positive parenting in T3 were insignificant for mother and father models, respectively. These findings could be due to the attrition rate in T3. The current study started with 648 participants in T1. In T2, 561 participants (87% of the original sample) filled in the questionnaires. For T3, the researcher was able to reach 316 students (49% of the original sample) from the original sample. Although the researcher offered sweepstakes for gift coupons to keep participation high, more than half of the sample was lost. Cross-tab analyses showed that there were no proportional gender differences between the whole sample in T1 (N = 648, 63.1 % females, 36.9 % males) and the participants who responded in all time points (N = 316, 63.9 % females, 36.1 % males).

It was also expected that negative affectivity would moderate the association between perceived positive parenting in Time 1 and attachment security in Time 2, for mothers and fathers, respectively. This hypothesis was tested with Hayes's (2015; 2021) moderated mediation model (Model Number

7). This hypothesis was not supported for mother-, and father-related variables. Belsky (1984) expected that children's temperament would be an explanatory factor for the parenting – attachment security link, and for adolescence, Koehn and Kerns (2018) speculated that negative affectivity could be one of the temperamental characteristics to moderate this link. The findings of the current study did not support such moderation role of negative affectivity.

Although not expected, these findings showed similar results with the previous research. In their meta-analysis investigating the association between temperament - attachment security among younger children, Groh et al. (2017) found weak temperament - attachment associations.

One reason for such a nonsignificant moderation impact can also stem from the source of data. In order to increase the data variability, in the current study, their mothers evaluated the negative affectivity of adolescents. In the literature, parental measures of negative affectivity were shown to be nonsignificantly associated with adolescents' reports of negative affectivity (Phillips, Lonigan, Driscoll, & Hooe, 2002). This nonsignificant association of maternal and adolescent reports of negative affectivity can also explain the nonsignificant findings in the current study.

Furthermore, Lengua (2006) showed that changes in temperamental characteristics and parenting affect each other through time. In the current study, negative affectivity was measured only once, and this could limit the interaction of negative affectivity – positive parenting in explaining the changes in attachment security.

One other explanation could be about the content of the temperamental characteristic, namely negative affectivity, measured in the current study. Instead of taking one dimension of temperament, the combination of different temperamental characteristics was thought to have a more robust predictive role in explaining (in)secure attachment phenomena for children and adolescents (Mangelsdorf & Frosch, 1999).

Another research perspective suggested that parental attachment security can be the precursor of children's temperament and personality. Thus, future research can also assess attachment – parenting – temperament associations

longitudinally (Hagekull, & Bohlin, 2003). In addition, there could be other factors associated with perceived parenting and attachment security toward parents among adolescents, such as parents' and adolescents' personalities (Schofield et al., 2012) and attachment processing biases (De Winter, Waters, Braet, & Bosmans, 2018). Thus, future studies are suggested to replicate the current findings by including the aforementioned variables.

4.1.2. Discussion of the Findings for Psychological Well-being

It was predicted that perceived positive parenting and attachment security would be positively associated with psychological well-being (PWB). This hypothesis tested with cross-lag analyses for mothers and fathers, respectively, and it was partially supported. Although the cross-lag model with mother variables did not show a good fit with the data, in T1, both perceived positive parenting and attachment security were positively and significantly associated with PWB. In addition, perceived positive parenting in T1 significantly and positively predicted PWB in T2.

The cross-lag model predicting PWB with father variables did not also show good fit with the data. Yet, in T1, both perceived positive parenting and attachment security was positively and significantly associated with PWB. In addition, attachment security toward the father in T1 significantly and positively predicted PWB in T2 among adolescents. This finding is in line with previous findings that, relationships with fathers had a unique role in predicting adolescents' PWB (Amato, 1994; Videon, 2005).

Although cross lag models did not show good fit, the associations for T1 were in the expected direction. Maternal and paternal positive parenting and attachment security were positively and significantly associated with adolescents' PWB. These findings are parallel to previous research that, loving and caring relationships with parents (Borelli et al., 2019), as well, parental attachment security (Amato, 1994) provides adolescents foundation to have higher PWB and carry this positive asset through time (Geiger & Schelbe, 2021).

Regarding the longitudinal roles of *paternal* positive parenting and *paternal* attachment security for adolescents' PWB, the nature of parenting behaviors can offer an explanation. Videon (2005) undelined that during adolescence, parenting behaviors occur as a reaction to adolescents' behaviors. It was also known that, compared to earlier developmental eras, adolescents spent less time with parents (Arnett, 2000), especially with their fathers, because of the gender role division in Turkish families (Sunar, 2002). Compared to perceived positive parenting, attachment security is a cumulative concept and has a longer-lasting impact. This characteristic of attachment can explain the longitidunal impact of paternal attachment security. When fathers spend less time with their adolescent children, it can be possible that their parenting behaviors have less impact compared to maternal parenting behaviors, who have the house manager role in Turkish families (Sunar, 2002). In addition, as the adolescents gain age, peers and romantic partners may start to have more prominent roles in predicting PWB concurrently and longitudinally (Amato, 1994; Rosenthal & Kobak, 2010). Future studies are suggested to replicate the current study by including peer-related variables.

In addition, a moderated mediation hypothesis was offered. This hypothesis was tested with Hayes's (2015; 2021) moderated mediation model (Model Number 7). The mediator role of attachment security was tested longitudinally; it was expected that perceived positive parenting in Time 1 would predict attachment security in Time 2, which, in turn, would predict outcome variables in Time 3. Since negative affectivity did not moderate the association between perceived positive parenting in T1 and attachment security in T2 for mother and father models (for a detailed explanation, see Section 4.1.1), the moderated mediation hypothesis was not supported for any outcome variables and was not discussed further.

4.1.3. Discussion of the Findings for of Subjective Well-being

The predictive roles hypothesis stated that perceived positive parenting and attachment security would be positively associated with subjective well-

being (SWB). This hypothesis was tested with cross-lag analyses, and it was partially supported for models with mother-and father-related variables (perceived positive parenting and parental attachment security). The cross-lag model predicting the SWB scores with mother variables showed poor fit with the data. However, in T1, both perceived positive parenting and attachment security was positively and significantly associated with SWB. In addition, perceived maternal positive parenting in T1 was significantly and positively associated with SWB scores of adolescents in T2.

The cross-lag model predicting the SWB scores with father variables showed poor fit with the data. In T1, both perceived positive parenting and attachment security was positively and significantly associated with SWB. Yet, SWB scores in T2 and in T3 were not predicted from paternal perceived positive parenting and attachment security from previous time points.

Although cross lag models did not show good fit, the associations among the study variables in T1 were in the expected direction. Maternal and paternal positive parenting and attachment security were positively and significantly associated with adolescents' SWB. These findings are parallel to previous research that positive parenting (Kocayörük, 2012; Liu & Wang, 2021) and attachment security (Jiang, Huebner, & Hills, 2013; Guo, 2019) were predictive of adolescents' subjective well-being, which was viewed as an index of mental health (Proctor, 2014). In addition, perceived positive maternal parenting was predictive of SWB scores of adolescents in T2, but no father-related variables had longitudinal effects. The nonsignificant father effects could stem from the time spent with fathers during adolescence (Videon, 2005) and the mothers' dominant roles in Turkish family systems (Sunar, 2002). In addition, the role fathers' positive parenting can be indirectly observed in mothers' positive parenting behaviors, such as maternal support (Yaban, Sayil, & Kindap, 2013). Future studies are suggested to replicate the current study's findings by also controlling the time spent with fathers during adolescence.

Despite the expectations and previous findings, except for T1, the current study's findings revealed no significant associations between parental attachment security and SWB across time points. There can be other mediating and

moderating factors for the parental attachment security – SWB association among adolescents, such as peer attachment security (Ma & Huebner, 2008) and hopefulness of adolescents (Jiang, Huebner, & Hills, 2013).

The findings of the current study also showed that, rather than parental relationship qualities, there could be other factors predicting SWB during adolescence. In the literature, other social relationships, such as peer and teacher relationships and school climate, were impactful in explaining adolescents' SWB (Oberle et al., 2011; Varela et al., 2019; Varela et al., 2021). Diener (2000) emphasized the importance of subjective evaluation in predicting SWB; thus, intrapersonal factors, such as self-concept clarity, hope (Xiang et al., 2022), and character strengths (Liu & Wang, 2021), could also account for the variance in SWB of adolescents. International research investigating the precursors of children's and adolescents' SWB from ten different countries reported that the most potent predictors were positive assets of relationships with parents, peer relationship quality, school climate, and neighborhood quality (Lawler et al., 2017). For the investigation of the SWB, another intrapersonal factor could be the temperament of the adolescents. The correlation analyses of the current study showed significant yet negative correlations between negative affectivity and SWB across time points (for details, see Section 3.3.1). Since it was not hypothesized, there was no further investigation of the negative affectivity – SWB link in the current study. Future studies are suggested to replicate the current study's findings by including such intra- and inter-personal factors.

4.1.4. Discussion of the Findings for Physical Activity

The predictive roles hypothesis stated that perceived positive parenting and attachment security would be positively associated with the physical activity scores of adolescents. This was tested with cross-lag analyses, and it was hypothesis was partially supported for models with mother-, and father-related variables (perceived positive parenting and attachment security). The cross-lag model with mother variables showed a good fit for the physical activity outcome. In T1, both maternal perceived positive parenting and maternal attachment

security were positively and significantly associated with physical activity scores of adolescents. In addition, maternal perceived positive parenting predicted physical activity scores in T2 longitudinally. Yet, physical activity scores in T2 and T3 were not significantly associated with perceived positive parenting and attachment security scores from the previous time points, namely T1 and T2.

The cross-lag model predicting physical activity scores of adolescents with father-related variables showed poor fit with the data. In T1, both perceived positive parenting and attachment security were positively and significantly associated with physical activity scores. Yet, physical activity scores in T2 and T3 were not significantly associated with paternal perceived positive parenting and attachment security from previous time points.

The hypotheses regarding the predictive roles of maternal and paternal perceived positive parenting were partially supported. In the literature, perceived parenting was shown to be directly and indirectly associated with adolescents' physical activity participation (Strauss, Rodzilsky, Burack, & Colin, 2001). Yet, there were also studies reporting nonsignificant associations between parenting practices and physical activity participation among adolescents (Craggs, Corder, van Sluijs, & Griffin, (2011). It is possible that the longitudinal associations between perceived parenting and physical activity could be revealed in the presence of mediators and or moderators, such as parental messages of physical fitness (De la Torre-Cruz, Suárez-Manzano, López-Serrano, & Ruiz-Ariza, 2020), parents' own physical activity participation (WHO, 2022b), and parental education levels (Krick & Sobal, 1990).

The findings did not support the *predictive role hypothesis regarding physical activity participation for attachment security*. It can be possible that longitudinal effects of parental attachment security would be detected in relation to mediating or moderating factors. For instance, parental attachment security was shown to be directly and indirectly associated with physical activity participation among adolescents. In addition, basic need satisfaction (Lai & Carr, 2020) and supportive social relationships in the sport settings (Lisinskiene, Guetterman, & Sukys, 2018) were reported to mediate the attachment – physical activity participation link. It was also discussed that, the predictive role of

parental attachment security can show variations depending on which developmental outcome studied. It was also suggested that if the role of parental attachment was to be investigated concerning physical activity, then, parental attachment security measures (self-reports or observations) should include items or situations related to physical activity participation (Lai & Carr, 2018). Lai and Carr (2020) developed a parental attachment security measure specific to physical activity contexts, which can explain better variance compared to global parental attachment security measures. Thus, future studies are suggested to either take context-related items into account, or directly repeat the current study with the measure of Lai and Carr (2020), when exploring the predictive role of parental attachmenr secuirty.

The nonsignificant findings regarding physical activity might also stem from the increasing impact of peers during adolescence. Significant bidirectional (Daniels & Leaper, 2006; Lee, Shin & Smith, 2019) and longitudinal (Lee et al., 2019) associations between physical activity participation and peer relationships were reported in the literature. Future studies can also investigate peer and parent effects simultaneously.

In addition, when evaluating these findings of physical activity, it would be wise to take into account what national education system in Turkey expects from adolescents. At the end of 8^{th} Grade, adolescents are required to take a national exam for the entrance of high school. Although it is not compulsory, at the end of the 12^{th} Grade, teenagers are advised to take the university entrance exam, so that they can increase their chances for a better future. Both exams take place only once a year, only on a specified date. Knowing that their children's future are decided with such an exam, many parents, especially the ones from low and middle SES, discourage their children from extra curricular activities, including sport activities. The low participation in sport activities may stem from the long processes of exam preparations.

4.1.5. Discussion of the Findings for Health Responsibility

The predictive roles hypothesis stated that perceived positive parenting and attachment security would be positively associated with the health responsibility scores of adolescents. - This was tested with cross-lag analyses, and it was hypothesis was partially supported for models with mother-, and father-related variables (perceived positive parenting and attachment security). The cross-lag models with mother and father variables showed poor fit for the health responsibility outcome. In T1, both perceived positive parenting and attachment security were positively and significantly associated with health responsibility scores for mother and father models, respectively. Yet, with mother and father models, health responsibility scores in T2 and T3 were not significantly associated with perceived positive parenting and attachment security scores from the previous time points.

In the literature, there is a scarcity of research investigating the correlates of health responsibility among adolescents (Ayres & Pontes, 2018). Findings in T1 were in line with the previous literature that positive parenting practices were significantly and positively related to health awareness (Rew et al., 2013), a close concept to health responsibility. In addition, no previous research reported any association between parental attachment security and healthy responsibility. Since it is one of the first, the current study's findings should be replicated before reaching generalization. In sum, health responsibility in adolescence is a developing research area, and the current study contributed to the literature by exploring the longitudinal predictive roles of perceived positive parenting and attachment security.

4.1.6. Discussion of the Findings for Healthy Diet

The predictive roles hypothesis stated that perceived positive parenting and attachment security would be positively associated with the healthy diet scores of adolescents. This was tested with cross-lag analyses, and it was hypothesis was partially supported for models with mother-, and father-related

variables (perceived positive parenting and attachment security). The cross-lag model with mother variables showed a good fit for the healthy diet outcome. In T1, both maternal perceived positive parenting and maternal attachment security were positively and significantly associated with healthy diet scores of adolescents. In addition, maternal perceived positive parenting in T1 significantly and positively predicted healthy diet scores in T2. Yet, healthy diet scores in T2 and T3 were not significantly predicted by perceived positive parenting and attachment security scores from the previous time points in the model with mother-related variables. The findings align with previous research that mothers' parenting characteristics play a crucial role in their children's healthy dieting (Balantekin et al., 2020). When adolescents perceive their mothers high on responsiveness and autonomy support, they are more likely to adopt a healthy diet because they accept their mothers' healthy eating suggestions (Lessard, Greenberger, & Chen, 2010). In the literature, as an asset of positive parenting, behavioral monitoring was also shown to be explanatory of adolescents' healthy diet (Balantekin et al., 2020). Future studies are suggested to replicate the findings of the current study by including behavioral monitoring in regard to healthy eating.

On the other hand, the cross-lag model predicting healthy diet scores of adolescents with father-related variables showed a poor fit with the data. In T1, both perceived positive parenting and attachment security were positively and significantly associated with healthy diet scores. Yet, healthy diet scores in T2 and T3 were not significantly associated with paternal perceived positive parenting and attachment security from previous time points. The nonsignificant associations among paternal relationship qualities and healthy eating scores of adolescents may stem from the gender role distribution in Turkish families (Sunar, 2002). Traditionally, mothers make the decisions regarding the food served at home, cook and serve the meals, and control their children's food intake. On the other hand, fathers are less involved with household chores, including food shopping and meal preparation at home, which, in turn, can diminish fathers' potential impact on adolescents' healthy diet (Balantekin et al., 2020). Thus, paternal parenting practices may not directly influence their

adolescent children's healthy eating habits. Future studies are suggested to control fathers' involvement with eating and cooking in the family settings as possible confounding on the association between paternal parenting and adolescents' healthy diet scores.

The findings revealed no longitudinal associations among attachment security and adolescents' healthy diet scores for mother and father models, respectively. These findings were partially in line with the previous findings, that compared to maternal attachment security, maternal positive parenting was a stronger predictor of adolescents' healthy eating (Anderson, Gooze, Lemeshow, & Whitaker, 2012). To the best of the researcher's knowledge, there were no studies investigating paternal attachment security and paternal positive parenting regading the healthy diet of adolescents. In addition, like in the case of physical activity (Lai & Carr, 2020), attachment security could be evaluated with specific items tapping on healthy eating habits. Besides, parents' eating behaviors were found to be a stronger predictor of adolescents' eating habits than general parenting practices and parents' messages on food consumption (Pedersen, Grønhøj, & Thøgersen, 2015). Thus, the current study's findings should be replicated by including parents' eating behaviors and healthy diet-specific items of attachment measures for healthy dieting. Last but not least, peer impact on adolescents' (un)healthy eating behaviors was well documented in the literature (Chan, Prendergast, Grønhøj, & Bech-Larsen, 2009; Ragelienė & Grønhøj, 2020). Future research can also explore adolescents' healthy diet behaviors with peer effects longitudinally.

4.1.7. Discussion of the Findings for Stress Management

The predictive roles hypothesis stated that perceived positive parenting and attachment security would be positively associated with the stress management scores of adolescents. This was tested with cross-lag analyses, and it was hypothesis was partially supported for models with mother-, and father-related variables (perceived positive parenting and attachment security). The cross-lag models predicting stress management with mother variables showed a

good fit. In T1, both maternal perceived positive parenting and maternal attachment security were positively and significantly associated with stress management scores of adolescents. In addition, maternal perceived positive parenting in T1 significantly and positively predicted stress management scores in T2. Yet, stress management scores in T2 and T3 were not significantly predicted by perceived positive parenting and attachment security scores from the previous time points in the model with mother-related variables.

The cross-lag model predicting stress management scores of adolescents with father-related variables showed poor fit with the data. In T1, both perceived positive parenting and attachment security were positively and significantly associated with stress management scores. However, stress management scores in T2 and in T3 were not significantly associated with paternal perceived positive parenting and attachment security from previous time points. These nonsignificant longitudinal associations may stem from time spent with fathers and mothers' dominant roles in Turkish family settings (Sunar, 2002). As mentioned before, parenting behaviors are reactions to adolescents' behaviors (Videon, 2005), if they adolescents spend less time with their parents, especially with fathers, it can be possible that fathers' impact is not significant for adolescents' stress management.

In the current study, attachment security was cross-sectionally and positively associated with stress management for both mothers and fathers. Yet, it did not yield any significant longitudinal paths for stress management. Possible moderators and mediators could be effective for the longitudinal links of attachment security and stress management. In the literature, attachment security–stress management associations were directly and indirectly associated. The literature reported the mediational roles of emotional expression (Cassidy, 1994) and regulation (Spangler & Zimmermann, 1999) for indirect associations between attachment security and stress management among adolescents. As moderators, the number of stressful situations (Lippold et al., 2016b) and conflict between adolescents and their parents (Decarli, Pierrehumbert, Schulz, Schaan, & Vögele, 2022) were reported to regulate the attachment security – stress management link among adolescents (Lippold, Davis, McHale, Almeida, &

King, 2016b). Future studies are suggested to explore such constructs concerning stress management of adolescents longitudinally.

In addition, in the current study, as the adolescents got older, they also got closer to the university or high school entrance exam preparation periods. Thus, the adolescents might need other support mechanisms in addition to positive parenting and attachment security. It can be beneficial for future studies to account for exam and academic achievement-related stress factors when investigating the predictive roles of perceived parenting and attachment security in relation to stress management among adolescents.

4.1.8. General discussion of the predictors for well-being and health-promotion behaviors during adolescence

All in all, the current study contributed to adolescence literature by providing not only cross-sectional but also longitidunal findings for perceived positive parenting, parental attachment security, negative affectivity, health promoting behaviors and well-being. For well-being components, namely psychological well-being (PWB) and subjective well-being (SWB), the positive maternal parenting had longitudinal predictive power (from T1 positive maternal parenting to T2 PWB and SWB). The rest of the predictors did not yield significant longitidunal associations for PWB and SWB, respectively. For health promotion components, except stress management, there were no significant longitunal associations from predictors (positive perceived parenting and parental attachment security) to outcome variables (physical activity, health responsibility and healthy diet). Like in well being components, cross-lag analyses for stress management yielded significant predictive role of perceived maternal positive parenting from T1 to T2. This could be due to the fact that, stress management is more strongly related to mental health promotion (Folkman & Lazarus, 1984).

4.2. Strengths, Limitations, and Suggestions

Strengths of the current study

Adolescence was remarked by rapid changes in physical, mental, and social developmental outcomes (Steinberg, 2004). Promotion of physical and mental health during adolescence held enormous importance, while the (un)healthy habits adopted during adolescence were predictive of health and morbidity throughout life-span (Hallal et al., 2006; Raj, Senjam, & Singh, 2013; Srof & Velsor-Friedrich, 2006). The current study contributed to the adolescent literature by investigating well-being and health-promoting behaviors concerning parental relationship qualities. The first strength of the current study is its longitudinal design. To meet the criterium of being a longitudinal study, it was underlined that a study should include data from at least three time points (Singer, Willett, & Willett, 2003). The current study employed three-time point longitudinal data for the investigation of the associations among the study variables. Longitudinal studies enable researchers to investigate the causality among precursors and developmental outcomes by controlling the previous levels of study variables (Nurmi, 2004; Shek & Ng, 2016).

Another strength of the current study is the investigation of perceived positive parenting, negative affectivity, and attachment security simultaneously for mothers and fathers, respectively. In the literature, these three constructs were suggested to be interrelated, yet, their associations were not investigated for adolescence. The current study revealed a nonsignificant moderator role of negative affectivity and discussed possible mechanisms of such nonsignificant results.

Limitations and suggestions

The current study is not without limitations. Three main limitations were identified: generalizability, measurement selection, and attrition rate. Each of them are be discussed concerning the literature, and suggestions are offered for

future studies. The first limitation is generalizability. The current study was conducted in Ankara, the capital of Turkey. Among the participating families, 38 % of the mothers held university or a higher degree diploma. This ratio is much higher than the general population higher education ratio of women in Turkey, which was 7.6 % in 2021 (TÜİK, 2021). Maternal education level was considered one of the strongest predictors of one's socio-economic status (SES, Hoff, Laursen, & Tardiff, 2002). In other words, regarding SES, the study sample differed from the general society in Turkey, bringing the findings' generalizability into question. The SES difference between study samples and the general population was not specific to the current study. It was documented that participants from lower SES were harder to reach and keep in the longitudinal studies (Heinrichs, Bertram, Kuschel, & Hahlweg, 2005).

Like other longitudinal studies in the literature (Heinrichs et al., 2005; Shek & Ng, 2016; Young, Powers, & Bell, 2006), the attrition rate was a fundamental limitation of the current study. The study started with 648 adolescents in T1, and in T3, there were only 316 students (49% of the original sample). At the end of each data collection time, there were sweepstakes for 30 gift coupons for adolescents. With enough funding, future studies can offer more gift coupons not only for adolescents but also for their families. The participants' age (Young et al., 2006) and SES (Heinrichs et al., 2005) were possible explanations for the attrition rates in the literature. Maternal education level was relatively homogeneous in the current study as the primary indicator of family SES (Hoff et al., 2002). Yet, the age of adolescents could be one of the explanatory factors in explaining the attrition rate. Adolescents are more likely to transfer to private schools to benefit from exam preparation activities as they get older. Future studies can also start with a greater sample size to keep the power high.

There are also limitations regarding the selection of measurement tools. To begin with, negative affectivity was measured with mother reports, which can fail to capture adolescents' negative affectivity (Phillips, Lonigan, Driscoll, & Hooe, 2002; for detailed explanation, see Section 4.1.1). Thus, future studies are suggested to include self-report and observation for the measurement of negative

affectivity among adolescents. A weakness of the current study regarding physical activity could stem from the self-report measurement technique. Among adolescents, self-report measures lacked the capacity to reflect actual participation in physical activities (Sirard & Pate, 2001). Future studies are suggested to benefit from more real-time measurements, such as heart rate monitors or motion sensors. In the current study, attachment security was measured as a single factor. In the literature, there are different perspectives on the measurement of adolescents' attachment security (Brenning, Soenens, Braet, Bosmans, 2011; Koehn & Kerns, 2018), and various factors of attachment security was found to be associated with different developmental outcomes (Bosmans & Kerns, 2015; Sarıtaş-Atalar & Altan-Atalay, 2017). Thus, future studies are suggested to investigate the predictive roles of attachment security for well-being and health-promoting behaviors with other attachment measures, as well.

4.3. Implications and Conclusions

The directionality among perceived parenting and attachment security was an issue to be investigated during adolescence (Koehn & Kerns, 2018). The bidirectional associations among perceived parenting and attachment security revealed that associations from perceived parenting to attachment security were more robust than the paths from attachment security to perceived parenting for mothers and fathers, respectively.

Well-being and health-promoting are two important developmental outcomes during adolescence, which have both concurrent and long-lasting impacts on life-span mental and physical health. The current study's findings showed that perceived positive parenting and attachment security have cross-sectional predictive power for well-being and health-promoting behaviors for adolescents. In addition, compared to models with fathers variables, models with mother variables yielded more significant predictors for well-being and health-promoting behaviors. These findings imply maternal parenting qualities are vital for well-being and health promotion during adolescence. Interventions targeting

to boost well-being and health-promoting behaviors during adolescence are suggested to include mothers and relationship qualities with mothers.

Furthermore, nonsignificant associations in the models with father variables can lead to questions about fathers' roles for the upbringing of adolescent children in Turkish culture. The current study's findings implied that parental relationship qualities have cross-sectional roles. Yet, there is a need for more studies exploring the predictive roles of parental construct by also considering possible moderators and mediators.

REFERENCES

Abar, C. C., Clark, G., & Koban, K. (2017). The long-term impact of family routines and parental knowledge on alcohol use and health behaviors: Results from a 14 year follow-up. *Journal of Child and Family Studies*, *26*(9), 2495-2504.

Aceves-Martins, M., Aleman-Diaz, A. Y., Giralt, M., & Solà, R. (2019). Involving young people in health promotion, research and policy-making: practical recommendations. *International Journal for Quality in Health Care*, *31*(2), 147-153.

Akkaya, S. (2017). A Closer look at rumination in adolescence: investigation of possible risk factors and moderators. Unpublished master thesis. Ankara: Middle East Technical University. Retrieved on January 18, 2021 from https://open.metu.edu.tr/handle/11511/26742

Alivernini, F., Cavicchiolo, E., Manganelli, S., Chirico, A., & Lucidi, F. (2019). Support for autonomy at school predicts immigrant adolescents' psychological well-being. *Journal of Immigrant and Minority Health*, *21*(4), 761-766.

Allen, J. P. (2008). *The attachment system in adolescence.* In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (p. 419–435). The Guilford Press.

Allen, J., McElhaney, K., Kuperminc, G., & Jodl, K. (2004). Stability and change in attachment security across adolescence. *Child Development*, *75*, 1792–1805.

Allen, J. P., McElhaney, K. B., Land, D. J., Kuperminc, G. P., Moore, C. W., O'Beirne–Kelly, H., & Kilmer, S. L. (2003). A secure base in adolescence: Markers of attachment security in the mother–adolescent relationship. *Child Development*, *74*(1), 292-307.

Allensworth, D. D. (2014). Strategies to improve adolescent health: Lessons learned. *Health Promotion Practice*, *15*(1), 72-78.

Alonzo, A. A. (1993). Health behavior: Issues, contradictions, and dilemmas. *Social Science & Medicine, 37*(8), 1019–1034.

Amato, P. (1990). Dimensions of the family environment as perceived by children: A multidimensional scaling study. *Journal of Marriage and the Family, 52,* 613–620.

Amato, P. R. (1994). Father-child relations, mother-child relations, and offspring psychological well-being in early adulthood. *Journal of Marriage and Family, 56,* 1031–1042.

American Psychological Association. (N.D.). Coping. Retrieved on July 25, 2022, from https://dictionary.apa.org/coping

American Psychological Association. (N.D.). Stress management. Retrieved on July 25, 2022, from https://dictionary.apa.org/stress-management

Ammaniti, M., van IJzendoorn, M., Speranza, A., & Tambelli, R. (2000). Internal working models of attachment during late childhood and early adolescence: An exploration of stability and change. *Attachment and Human Development, 2,* 328–346.

Anderson, S. E., Gooze, R. A., Lemeshow, S., & Whitaker, R. C. (2012). Quality of early maternal–child relationship and risk of adolescent obesity. *Pediatrics*, *129*(1), 132-140.

Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, *16*(5), 427-454.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *The American Psychologist, 55*(5), 469–480.

Arredondo, E. M., Elder, J. P., Ayala, G. X., Campbell, N., Baquero, B., & Duerksen, S. (2006). Is parenting style related to children's healthy eating and physical activity in Latino families?. *Health education research*, *21*(6), 862-871.

Asok, A., Bernard, K., Roth, T. L., Rosen, J. B., & Dozier, M. (2013). Parental responsiveness moderates the association between early-life stress and reduced telomere length. *Development and psychopathology*, *25*(3), 577-585.

Ayres, C. G., & Pontes, N. M. (2018). Use of theory to examine health responsibility in urban adolescents. *Journal of Pediatric Nursing*, *38*, 40-45.

Bahar, Z., Beser, A., Gordes, N., Ersin, F., & Kıssal, A. (2008). Healthy life style behavior scale II: A reliability and validity study. *Journal of Cumhuriyet University School of Nursing*, *12*(1), 1-13.

Balantekin, K. N., Anzman-Frasca, S., Francis, L. A., Ventura, A. K., Fisher, J. O., & Johnson, S. L. (2020). Positive parenting approaches and their association with child eating and weight: A narrative review from infancy to adolescence. *Pediatric Obesity*, *15*(10), e12722. https://doi.org/10.1111/ijpo.12722

Balluerka, N., Gorostiaga, A., Alonso-Arbiol, I., & Aritzeta, A. (2016). Peer attachment and class emotional intelligence as predictors of adolescents' psychological well-being: A multilevel approach. *Journal of Adolescence*, *53*, 1-9.

Barger, S. D., Donoho, C. J., & Wayment, H. A. (2009). The relative contributions of race/ethnicity, socioeconomic status, health, and social relationships to life satisfaction in the United States. *Quality of Life Research*, *18*(2), 179-189.

Bayraktar, F., Sayıl, M., & Kumru, A. (2009). Liseli Ergenler ve Üniversiteli Gençlerde Benlik Saygısı: Ebeveyn ve Akrana Bağlanma, Empati ve Psikolojik Uyum Değişkenlerinin Rolü. *Türk Psikoloji Dergisi*, *24*, 48-63.

Bayram, H. G. (2014). *What determines the sibling conflict resolution strategies of adolescents? Parents, siblings, or temperament* (Unpublished Master Thesis, Middle East Technical University, Ankara, Turkey).

Beck, A. L., Iturralde, E., Haya-Fisher, J., Kim, S., Keeton, V., & Fernandez, A. (2019). Barriers and facilitators to healthy eating among low-income Latino adolescents. *Appetite, 138*, 215-222.

Becker-Stoll, F., Fremmer-Bombik, E., Wartner, U., Zimmermann, P., & Grossmann, K. E. (2008). Is attachment at ages 1, 6 and 16 related to autonomy and relatedness behavior of adolescents in interaction towards their mothers? *International Journal of Behavioral Development, 32*, 372–380. doi:10.1177/0165025408093654

Belsky, J. (1984). The determinants of parenting: A process model. *Child Development, 55*(1), 83-96.

Ben-Ami, N., & Baker, A. J. (2012). The long-term correlates of childhood exposure to parental alienation on adult self-sufficiency and well-being. *The American Journal of Family Therapy*, *40*(2), 169-183.

Ben-Arieh, A. (2010). Developing indicators for child well-being in a changing context. In C. McAuley & W. Rose (Eds.), *Child well-being: Understanding children's lives* (pp. 129–142). London: Jessica Kingsley.

Bentler, P. M. (1989). *EQS structural equations program manual*. BMDP Statistical Software: Los Angeles.

Boreham, C., Twisk, J., Neville, C., Savage, M., Murray, L., & Gallagher, A. (2002). Associations between physical fitness and activity patterns during adolescence and cardiovascular risk factors in young adulthood: the Northern Ireland Young Hearts Project. *International Journal of Sports Medicine*, *23*(S1), 22-26.

Borelli, J. L., Brugnera, A., Zarbo, C., Rabboni, M., Bondi, E., Tasca, G. A., & Compare, A. (2019). Attachment comes of age: Adolescents' narrative coherence and reflective functioning predict well-being in emerging adulthood. *Attachment & Human Development, 21*(4), 332-351.

Bornstein, M.H. (2005). Positive parenting and positive development in children. In Lerner, R.M., Jacobs, F. & Wertlieb, D. (Eds.) *Applied developmental science: An advanced textbook* (pp. 155 - 177). Sage Publications.

Bosmans, G., & Kerns, K. A. (2015). Attachment in middle childhood: Progress and prospects. *New directions for child and adolescent development*, *2015*(148), 1-14.

Bowlby, J. (1969/1982). Attachment and loss: Vol. 1: Attachment. New York, NY: Basic Books.

Brenning, K., Soenens, B., Braet, C., Bosmans, G. (2011). An adaptation of the experiences in Close Relationships Scale-Revised for use with children and adolescents. *Journal of Social and Personal Relationships, 28*(8), 1048-1072. https://doi.org/10.1177/0265407511402418

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Beverly Hills: Sage.

Buist, K. L., Deković, M., Meeus, W., & van Aken, M. A. (2002). Developmental patterns in adolescent attachment to mother, father and sibling. *Journal of Youth and Adolescence*, *31*(3), 167-176.

Buist, K. L., Reitz, E., & Dekovic, M. (2008). Attachment stability and change during adolescence: A longitudinal application of the social relations model. *Journal of Social and Personal Relationships, 25*, 429–444.

Bunke, S., Apitzsch, E., & Bäckström, M. (2013). The impact of social influence on physical activity among adolescents–a longitudinal study. *European Journal of Sport Science*, *13*(1), 86-95.

Cai, M., Hardy, S. A., Olsen, J. A., Nelson, D. A., & Yamawaki, N. (2013). Adolescent–parent attachment as a mediator of relations between parenting and adolescent social behavior and wellbeing in China. *International Journal of Psychology*, *48*(6), 1185-1190.

Capaldi, D. M., Kerr, D. C., & Tiberio, S. S. (2018). The Oregon Youth Study–Three Generational Study: A review of design, theory, and findings. In V. I. Eichelsheim, & S. G. A. van de Weijer (Eds.). *Intergenerational Continuity of Criminal and Antisocial Behaviour*, pp.137-161, London: Routledge.

Carlson, E. A. (1998). A prospective longitudinal study of attachment disorganization/disorientation. *Child Development*, 69(4), 1107–1128.

Carter, M., McGee, R., Taylor, B., & Williams, S. (2007). Health outcomes in adolescence: Associations with family, friends and school engagement. *Journal of Adolescence, 30*(1), 51-62.

Cassidy, J. (1994). Emotion regulation: Influences of attachment relationships. *Monographs of the Society for Research in Child Development, 59*, 228–249. doi:10.1111/j.1540-5834.1994.tb01287.x

Chan, K., Prendergast, G., Grønhøj, A., & Bech-Larsen, T. (2009). Adolescents' perceptions of healthy eating and communication about healthy eating. *Health Education, 109*(6), 474-490.

Chan, K., & Tsang, L. (2011). Promote healthy eating among adolescents: A Hong Kong study. *Journal of Consumer Marketing, 28*(5), 354-362.

Chang, L. C. (2011). Health literacy, self-reported status and health promoting behaviors for adolescents in Taiwan. *Journal of Clinical Nursing, 20*(1-2), 190-196.

Chen, M. Y., Wang, E. K., Yang, R. J., & Liou, Y. M. (2004). Adolescent health promotion scale: Development and psychometric testing. *Public Health Nursing, 20*(2), 104-110.

Chen, M. Y., Shiao, Y. C., & Gau, Y. M. (2007). Comparison of adolescent health-related behavior in different family structures. *Journal of Nursing Research, 15*(1), 1-10.

Chotai, J., Jonasson, M., Hägglöf, B., & Adolfsson, R. (2005). Adolescent attachment styles and their relation to the temperament and character traits of personality in a general population. *European Psychiatry, 20*(3), 251-259.

Chu-Ko, F., Chong, M. L., Chung, C. J., Chang, C. C., Liu, H. Y., & Huang, L. C. (2021). Exploring the factors related to adolescent health literacy, health-promoting lifestyle profile, and health status. *BMC Public Health*, *21*(1), 1-12. https://doi.org/10.1186/s12889-021-12239-w

Cohen, S. (2004). Social relationships and health. *American Psychologist, 59*(8), 676–684. https://doi.org/10.1037/0003-066X.59.8.676

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin, 127*, 87-127. doi: 10.1037//0033-2909.127.1.87

Craggs, C., Corder, K., van Sluijs, E. M., & Griffin, S. J. (2011). Determinants of change in physical activity in children and adolescents: a systematic review. *American Journal of Preventive Medicine*, *40*(6), 645-658.

Crews, D. J., Lochbaum, M. R., & Landers, D. M. (2004). Aerobic physical activity effects on psychological well-being in low-income Hispanic children. *Perceptual and Motor Skills*, *98*(1), 319-324.

Cripps, K., & Zyromski, B. (2009). Adolescents' psychological well-being and perceived parental involvement: Implications for parental involvement in middle schools. *RMLE Online*, *33*(4), 1-13.

Croll, J. K., Neumark-Sztainer, D., & Story, M. (2001). Healthy eating: What does it mean to adolescents?. *Journal of Nutrition Education*, *33*(4), 193-198.

Çelebi, E., Gündogdu, C., & Kizilkaya, A. (2017). Determination of Healthy Lifestyle Behaviors of High School Students. *Universal Journal of Educational Research*, *5*(8), 1279-1287.

Dallacker, M., Hertwig, R., Peters, E., & Mata, J. (2016). Lower parental numeracy is associated with children being under-and overweight. *Social Science & Medicine*, *161*, 126-133.

Dallacker, M., Hertwig, R., & Mata, J. (2018). Parents' considerable underestimation of sugar and their child's risk of overweight. *International Journal of Obesity, 42*(5), 1097-1100.

Daniels E. & Leaper C. (2006). A longitudinal investigation of sport participation, peer acceptance, and self-esteem among adolescentgirls and boys. *Sex Roles, 55(*11), 875-880.

Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin, 113*(3), 487-496.

Darling, N., & Toyokawa, T. (1997). Construction and validation of the Parenting Style Inventory II. *The Pennsylvania State University: Internal publication*. doi:10.13140/RG.2.2.22528.87048

Davids, E. L., Roman, N. V., & Leach, L. (2017). The link between parenting approaches and health behavior: a systematic review. *Journal of Human Behavior in the Social Environment*, *27*(6), 589-608.

Decarli, A., Pierrehumbert, B., Schulz, A., Schaan, V. K., & Vögele, C. (2022). Disorganized attachment in adolescence: Emotional and physiological dysregulation during the Friends and Family Interview and a conflict interaction. *Development and Psychopathology*, *34*(1), 431-445.

Deci, E. L., & Ryan, R. M. (2008). Hedonia, eudaimonia, and well-being: An introduction. *Journal of Happiness Studies, 9*(1), 1-11.

De la Torre-Cruz, M. J., Suárez-Manzano, S., López-Serrano, S., & Ruiz-Ariza, A. (2020). Perceived physical fitness mediates the relationship between parental support and physical activity enjoyment in overweight and obese adolescents. *Health Education Research, 35*(5), 407-417.

De Winter, S., Waters, T. E., Braet, C., & Bosmans, G. (2018). Middle childhood problem behaviors: Testing the transaction between responsive parenting, temperament, and attachment-related processing biases. *Journal of Child and family Studies*, *27*(3), 916-927.

De Wolff, M., & Van IJzendoorn, M. H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development, 68*, 571–591. doi:10.2307/1132107

Derryberry, D., Reed, M.A., & Pilkenton-Taylor, C. (2003). Temperament and coping: Advantages of an individual differences perspective. Development and Psychopathology, 15, 1049–1066.

Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist, 55*(1), 34–43. https://doi.org/10.1037/0003-066X.55.1.34

Diener, E., Oishi, S., & Lucas,R. E. (2002). *Subjective well-being: The science of happiness and life satisfaction.* In C.R. Snyder & S.J. Lopez (Ed.), Handbook of Positive Psychology. (pp. 187-194). Oxford and New York : Oxford University Press.

Diener, E., Sapyta, J. J., & Suh, E. (1998). Subjective well-being is essential to well-being. *Psychological Inquiry*, *9*(1), 33-37.

Diener, M. L., & Diener McGavran, M. B. (2008). What makes people happy?: A developmental approach to the literature on family relationships and well-being. In M. Eid & R. J. Larsen (Eds.), *The science of subjective well-being* (pp. 347–375). Guilford Press.

Dishion, T. J., & McMahon, R. J. (1998). Parental monitoring and the prevention of child and adolescent problem behavior: A conceptual and empirical formulation. *Clinical Child and Family Psychology Review*, *1*, 61-75.

Doggui, R., Ward, S., Johnson, C., & Bélanger, M. (2021). Trajectories of eating behaviour changes during adolescence. *Nutrients*, *13*(4), 1313.

Duncan, P. M., Garcia, A. C., Frankowski, B. L., Carey, P. A., Kallock, E. A., Dixon, R. D., & Shaw, J. S. (2007). Inspiring healthy adolescent choices: a rationale for and guide to strength promotion in primary care. *Journal of Adolescent Health*, *41*(6), 525-535.

Eisenberg, N., & Fabes, R. A. (2006). Emotion, regulation, and children's socioemotional competence. In L. Balter & C. S. Tamis-LeMonda (Eds.), *Child psychology: A handbook of contemporary issues* (2nd ed., pp. 357–381). New York: Psychology Press.

Eisenberg, N., Fabes, R. A., Shepard, S. A., Guthrie, I. K., Murphy, B. C., & Reiser, M. (1999). Parental reactions to children's negative emotions: Longitudinal relations to quality of children's social functioning. *Child Development, 70*, 513–534.

Ercan, S., Dallar, Y. B., Önen, S., & Engiz, Ö. (2012). Prevalence of obesity and associated risk factors among adolescents in Ankara, Turkey. *Journal of Clinical Research in Pediatric Endocrinology*, *4*(4), 204-207.

Eryilmaz, A. (2012). A model for subjective well-being in adolescence: Need satisfaction and reasons for living. *Social Indicators Research, 107*(3), 561–574.

Evans, G. W., Boxhill, L., & Pinkava, M. (2008). Poverty and maternal responsiveness: The role of maternal stress and social resources. *International Journal of Behavioral Development*, *32*(3), 232-237.

Garcia, C. (2010). Conceptualization and measurement of coping during adolescence: A review of the literature. *Journal of Nursing scholarship*, *42*(2), 166-185.

Garcia, D., & Moradi, S. (2013). The affective temperaments and well-being: Swedish and Iranian adolescents' life satisfaction and psychological well-being. *Journal of Happiness Studies*, *14*(2), 689-707.

Geiger J. M., & Schelbe, L. (2021). Child Development and well-Being. In: *The Handbook on Child Welfare Practice.* (pp. 55-81). Springer, Cham. https://doi.org/10.1007/978-3-030-73912-6_3

Gervais, C., & Jose, P. E. (2020). How does family connectedness contribute to youths' health? The mediating role of coping strategies. *Family Process*, *59*(4), 1627-1647.

Gilman, R., & Huebner, E. S. (2006). Characteristics of adolescents who report very high life satisfaction. *Journal of Youth and Adolescence, 35*, 311–319.

Goldsmith, H. H., Buss, A. H., Plomin, R., Rothbart, M. K., Thomas, A., Chess, S., ... & McCall, R. B. (1987). Roundtable: What is temperament? Four approaches. *Child Development, 58*, 505-529.

Goossens, L., Van Durme, K., Naeye, H., Verbeken, S., & Bosmans, G. (2019). Insecure attachment moderates the association between thin internalization and girls' eating concerns. *Journal of Child and Family Studies*, *28*(11), 3183-3192.

Goossens, L., Van Malderen, E., Van Durme, K., & Braet, C. (2016). Loss of control eating in adolescents: Associations with adaptive and maladaptive emotion regulation strategies. *Eating Behaviors*, *22*, 156-163.

Gottman, J. M., & Katz, L. F. (1989). Effects of marital discord on young children's peer interaction and health. *Developmental Psychology, 25*, 373-381.

Greenberg, M. T., Siegel, J. M., & Leitch, C. J. (1983). The nature and importance of attachment relationships to parents and peers during adolescence. *Journal of Youth and Adolescence*, *12*(5), 373–386. doi:10.1007/ BF02088721.

Grenville-Cleave, B., Brady, A., & Kavanagh, E. (2017). Positive psychology of relationships in sport and physical activity. In *Positive Psychology in Sport and Physical Activity* (pp. 140-152). Routledge.

Groh, A. M., Narayan, A. J., Bakermans-Kranenburg, M. J., Roisman, G. I., Vaughn, B. E., Fearon, R. P., & van IJzendoorn, M. H. (2017). Attachment and temperament in the early life course: A meta-analytic review. *Child Development, 88*, 770-795. https://doi.org/10.1111/cdev.12677

Grossmann, K., Grossmann, K. E., Fremmer-Bombik, E., Kindler, H., Scheuerer-Englisch, H., & Zimmermann, A. P. (2002). The uniqueness of the child–father attachment relationship: Fathers' sensitive and challenging play as a pivotal variable in a 16-year longitudinal study. *Social Development, 11*(3), 301-337.

Grossmann, K., Grossmann, K. E., Kindler, H., & Zimmermann, P. (2008). A wider view of attachment and exploration: The influence of mothers and fathers on the development of psychological security from infancy to young adulthood. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory research, and clinical applications* (pp. 857–879). New York: The Guilford Press.

Guerra-Bustamante, J., León-del-Barco, B., Yuste-Tosina, R., López-Ramos, V. M., & Mendo-Lázaro, S. (2019). Emotional intelligence and psychological well-being in adolescents. *International Journal of Environmental Research and Public Health, 16*(10), Article no 1720, 1-12.

Guo, X. (2019). The association between family structure and subjective well-being among emerging adults in China: Examining the sequential mediation effects of maternal attachment, peer attachment, and self-efficacy. *Journal of Adult Development, 26*(1), 22-30.

Hagekull, B., & Bohlin, G. (2003). Early temperament and attachment as predictors of the Five Factor Model of personality. *Attachment & Human Development, 5*(1), 2-18.

Haines, J., Rifas-Shiman, S. L., Horton, N. J., Kleinman, K., Bauer, K. W., Davison, K. K., ... & Gillman, M. W. (2016). Family functioning and quality of parent-adolescent relationship: cross-sectional associations with adolescent weight-related behaviors and weight status. *International Journal of Behavioral Nutrition and Physical Activity, 13*(1), 1-12.

Hallal, P. C., Victora, C. G., Azevedo, M. R., & Wells, J. C. (2006). Adolescent physical activity and health. *Sports Medicine, 36*(12), 1019-1030.

Hamilton, C. (2000). Continuity and discontinuity of attachment from infancy through adolescence. *Child Development, 71*, 690.

Hampel, P. (2007). Brief report: Coping among Austrian children and adolescents. *Journal of Adolescence*, *30*(5), 885-890.

Hampel, P., Meier, M., & Kümmel, U. (2008). School-based stress management training for adolescents: Longitudinal results from an experimental study. *Journal of Youth and Adolescence*, *37*(8), 1009-1024.

Hankin, B. L., & Abramson, L. Y. (2001). Development of gender differences in depression: An elaborated cognitive vulnerability-transactional stress theory. *Psychological Bulletin*, *127*, 773-796. doi: 10.1O37//O033-29O9.127.6.773

Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, *50*(1), 1-22.

Hayes, A. F. (2021). *Process Macro. V3.5.3*. Retrieved on April 09, 2021, from https://www.processmacro.org/download.html

Heinrichs, N., Bertram, H., Kuschel, A., & Hahlweg, K. (2005). Parent recruitment and retention in a universal prevention program for child behavior and emotional problems: Barriers to research and program participation. *Prevention Science*, *6*(4), 275-286.

Herman, C. P., Polivy, J. & Roth, D. A. (2003). Effects of others on food intake: A normative interpretation. *Psychological Bulletin*, *129*, 873–86. doi: 10.1037/0033-2909.129.6.873.

Hoff, E., Laursen, B., & Tardiff, T. (2002). Socioeconomic status and parenting. CH:8. In Bornstein, M. H. (Ed.) Handbook of Parenting Volume 2: Biology and Ecology of Parenting. New Jersey: Lawrence Erlbaum Associates. P.231-252. (2nd Ed).

Holopainen, L., Lappalainen, K., Junttila, N., & Savolainen, H. (2012). The role of social competence in the psychological well-being of adolescents in secondary education. *Scandinavian Journal of Educational Research*, *56*(2), 199-212.

Houle, J., Meunier, S., Coulombe, S., Mercerat, C., Gaboury, I., Tremblay, G., ... & Lavoie, B. (2017). Peer positive social control and men's health-promoting behaviors. *American Journal of Men's Health*, *11*(5), 1569-1579.

Howard, M. S. & Medway, F. J. (2004). Adolescents' attachment and coping with stress. *Psychology in the Schools, 41*(3), 391-402.

Huebner, E. S., Suldo, S. M., & Gilman, R. (2006). Life Satisfaction. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 357–368). National Association of School Psychologists.

IJzendoorn, M. H. & Bakermans-Kranenburg, M. J. (2012). Integrating temperament and attachment: The differential susceptibility paradigm. In M. Zentner & R. L. Shiner (Eds). *Handbook of Temperament* (pp.41-68). Guilford Press: New York.

Issner, J. H., Mucka, L. E., & Barnett, D. (2017). Increasing positive health behaviors in adolescents with nutritional goals and exercise. *Journal of Child and Family Studies*, *26*(2), 548-558.

Jahnke, R. (2001). Health promotion and complementary medicine: Expanding the continuum of care. In N. Faass (Ed.), *Integrating Complementary Medicine into Health Systems* (pp. 460-466). Gaithersburg, MD: Aspen.

Jiang, X. U., Huebner, E. S., & Hills, K. J. (2013). Parent attachment and early adolescents'life satisfaction: The mediating effect of hope. *Psychology in the Schools*, *50*(4), 340-352.

Jones, J. D., Brett, B. E., Ehrlich, K. B., Lejuez, C. W., & Cassidy, J. (2014). Maternal attachment style and responses to adolescents' negative emotions: The mediating role of maternal emotion regulation. *Parenting*, *14*(3-4), 235-257.

Kansky, J., Allen, J. P., & Diener, E. (2016). Early adolescent affect predicts later life outcomes. *Applied Psychology: Health and Well-Being*, *8*(2), 192-212. https://doi.org/10.1111/aphw.12068

Karavasilis, L., Doyle, A. B., & Markiewicz, D. (2003). Associations between parenting style and attachment to mother in middle childhood and adolescence. *International Journal of Behavioral Development*, *27*(2), 153-164.

Kerns, K. A., Aspelmeier, J. E., Gentzler, A. L., & Grabill, C. M. (2001). Parent-child attachment and monitoring in middle childhood. *Journal of Family Psychology*, *15*(1), 69–81.

Kerns, K. A., Klepac, L., & Cole, A. K. (1996). Peer relationships and preadolescents‟ perceptions of security in the child-mother relationship. *Developmental Psychology, 32,* 457-466.

Kim, J., & Choi, Y. (2018). Multidimensional factors of determining trajectories in self-rated health and depressive symptoms among Korean children and adolescents. *Social Work in Health Care, 57*(9), 717-736. https://doi.org/10.1080/00981389.2018.1494080

Kin-Isler, A., Asci, F. H., Altintas, A., & Guven-Karahan, B. (2009). Physical activity levels and patterns of 11-14 year-old Turkish adolescents. *Adolescence*, *44*(176), 1005-1015.

Kirimer, F., Akça, E., & Sümer, N. (2014). Orta Çocuklukta Anneye Kaygili ve Kaçinan Baglanma: Yakin Iliskilerde Yasantilar Envanteri-II Orta Çocukluk Dönemi Ölçeginin Türkçeye Uyarlanmasi. *Turk Psikoloji Yazilari*, *17*(33), 45-57.

Kobak, R., Abbott, C., Zisk, A., & Bounoua, N. (2017). Adapting to the changing needs of adolescents: parenting practices and challenges to sensitive attunement. *Current Opinion in Psychology*, *15*, 137-142.

Kocayörük, E. (2012). The perception of parents and well-being of adolescents: Link with basic psychological need satisfaction. *Procedia-Social and Behavioral Sciences*, *46*, 3624-3628.

Kochanska, G. (2001). Emotional development in children with different attachment histories: The first 3 years. *Child Development, 72,* 474–490. doi:10.1111/1467-8624.00291

Koehn, A. J., & Kerns, K. A. (2018). Parent–child attachment: Meta-analysis of associations with parenting behaviors in middle childhood and adolescence. *Attachment & Human Development*, *20*(4), 378-405. https://doi.org/10.1080/14616734.2017.1408131

Krahn, G. L., Robinson, A., Murray, A. J., Havercamp, S. M., Havercamp, S., Andridge, R., ... & Witwer, A. (2021). It's time to reconsider how we define health: Perspective from disability and chronic condition. *Disability and Health Journal*, *14*(4), 101129. https://doi.org/10.1016/j.dhjo.2021.101129

Krick, J. P., & Sobal, J. (1990). Relationships between health protective behaviors. *Journal of Community Health*, *15*(1), 19-34.

Kwan, Y. K. (2010). Life satisfaction and self-assessed health among adolescents in Hong Kong. *Journal of Happiness Studies*, *11*, 383–393.

Lai, Y. H., & Carr, S. (2018). A critical exploration of child-parent attachment as a contextual construct. *Behavioral Sciences*, *8*(12), 112.

Lai, Y. H., & Carr, S. (2020). Is parental attachment security contextual? Exploring context-specific child–parent attachment patterns and psychological well-being in Taiwanese youths. *Journal of Research on Adolescence*, *30*(2), 389-405.

Lakhdir, M. P. A., Rozi, S., Peerwani, G., & Nathwan, A. A. (2020). Effect of parent-child relationship on physical aggression among adolescents: Global school-based student health survey. *Health Psychology Open*, *7*, 1-8. https://doi.org/10.1177/2055102920954715

Landsford, J. E. (2018). A lifespan perspective on subjective well-being. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of Well-being. Salt Lake City*, UT: DEF Publishers. Retrieved on March 23, 2022, from https://nobascholar.com/chapters/25/download.pdf

Larson, N. I., Neumark-Sztainer, D., Hannan, P. J., & Story, M. (2007). Family meals during adolescence are associated with higher diet quality and healthful meal patterns during young adulthood. *Journal of the American Dietetic Association*, *107*(9), 1502-1510.

Laukkanen, J., Ojansuu, U., Tolvanen, A., Alatupa, S., & Aunola, K. (2014). Child's difficult temperament and mothers' parenting styles. *Journal of Child and Family Studies, 23*, 312–323. doi: 10.1007/s10826-013-9747-9

Lawler, M. J., Newland, L. A., Giger, J. T., Roh, S., & Brockevelt, B. L. (2017). Ecological, relationship-based model of children's subjective well-being: Perspectives of 10-year-old children in the United States and 10 other countries. *Child Indicators Research*, *10*(1), 1-18.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.

Lengua, L. J. (2006). Growth in temperament and parenting as predictors of adjustment during children's transition to adolescence. *Developmental Psychology*, *42*(5), 819-832.

Lee, S., Shin, M., & Smith, A. L. (2019). The relationship of physical activity from physical education with perceived peer acceptance across childhood and adolescence. *Journal of School Health*, *89*(6), 452-459.

Leon, J. C., Carmona, J., & García, P. (2010). Health-risk behaviors in adolescents as indicators of unconventional lifestyles. *Journal of Adolescence*, *33*(5), 663-671.

Lessard, J., Greenberger, E., & Chen, C. (2010). Adolescents' response to parental efforts to influence eating habits: When parental warmth matters. *Journal of Youth and Adolescence*, *39*(1), 73-83.

Li, R., Bunke, S., & Psouni, E. (2016). Attachment relationships and physical activity in adolescents: The mediation role of physical self-concept. *Psychology of Sport and Exercise*, *22*, 160-169.

Li, R., Yao, M., Chen, Y., & Liu, H. (2020). Parent autonomy support and psychological control, dark triad, and subjective well-being of Chinese adolescents: Synergy of variable-and person-centered approaches. *The Journal of Early Adolescence*, *40*(7), 966-995.

Lin, W. H., & Yi, C. C. (2019). Subjective well-being and family structure during early adolescence: a prospective study. *The Journal of Early Adolescence*, *39*(3), 426-452.

Lindqvist, A. K., Kostenius, C., & Gard, G. (2012). "Peers, parents and phones"—Swedish adolescents and health promotion. *International Journal of Qualitative Studies on Health and Well-being*, *7*(1), 1-9.

Lippold, M., Davis, K. D., McHale, S. M., Orfeu, B., & Almeida, D. M. (2016a). Daily stressor reactivity during adolescence: The buffering role of parental warmth. *Health Psychology*, *35*(9), 1027-1035.

Lippold, M., Davis, K. D., McHale, S. M., Almeida, D. M., & King, R. B. (2016b). Experiences with parents and youth physical health symptoms and cortisol: A daily diary investigation. *Journal of Research on Adolescence*, *26*(2), 226-240.

Lisinskiene, A., Guetterman, T., & Sukys, S. (2018). Understanding adolescent–parent interpersonal relationships in youth sports: A mixed-methods study. *Sports*, *6*(2), 41, https://doi.org/10.3390/sports6020041

Lisinskiene, A., & Juskeliene, V. (2019). Links between adolescents' engagement in physical activity and their attachment to mothers, fathers, and peers. *International Journal of Environmental Research and Public Health*, *16*(5), 866. https://www.mdpi.com/1660-4601/16/5/866

Liu, Q., & Wang, Z. (2021). Associations between parental emotional warmth, parental attachment, peer attachment, and adolescents' character strengths. *Children and Youth Services Review*, *120*, 105765. https://doi.org/10.1016/j.childyouth.2020.105765

Loeber, R., Farrington, D. P., Stouthamer-Loeber, M., Moffitt, T. E., Caspi, A., & Lynam, D. (2001). Male mental health problems, psychopathy, and personality traits: Key findings from the first 14 years of the Pittsburgh Youth Study. *Clinical Child and Family Psychology Review*, *4*(4), 273-297.

Longmuir, P. E., Corey, M., & McCrindle, B. W. (2021). Interactions with home and health environments discourage physical activity: Reports from children with complex congenital heart disease and their parents. *International Journal of Environmental Research and Public Health*, *18*(9), 4903.

Lucassen, N., Tharner, A., Van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., Volling, B. L., Verhulst, F. C., & Tiemeier, H. (2011). The association between paternal sensitivity and infant–father attachment security: A meta-analysis of three decades of research. *Journal of Family Psychology*, *25*(6), 986-992.

Ma, C. Q., & Huebner, E. S. (2008). Attachment relationships and adolescents' life satisfaction: Some relationships matter more to girls than boys. *Psychology in the Schools*, *45*(2), 177–190.

Mageau, G. A., Ranger, F., Joussemet, M., Koestner, R., Moreau, E., & Forest, J. (2015). Validation of the Perceived Parental Autonomy Support Scale (P-PASS). *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, *47*(3), 251.

Mangelsdorf, S. C., & Frosch, C. A. (1999). Temperament and attachment: One construct or two? *Advances in Child Development and Behavior*, *27*, 181-220.

Marrero-Quevedo, R. J., Blanco-Hernández, P. J., & Hernández-Cabrera, J. A. (2019). Adult attachment and psychological well-being: The mediating role of personality. *Journal of Adult Development*, *26*(1), 41-56.

Matton, A., Goossens, L., Vervaet, M., & Braet, C. (2017). Effortful control as a moderator in the association between punishment and reward sensitivity and eating styles in adolescent boys and girls. *Appetite*, *111*, 177-186.

Maynard, P. G. (2001). *An investigation into the relationships between attachment style, health-beliefs and health behaviors*. Unpublished master thesis. University of Durham. Retrieved on July 11, 2022 from http://etheses.dur.ac.uk/3807/1/3807_1368.pdf?UkUDh:CyT

McElhaney, K. B., Allen, J. P., Stephenson, J. C., & Hare, A. L. (2009). Attachment and autonomy during adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology, Vol 1: Individual Bases of Adolescent Development* (3rd ed., pp. 358– 403). Hoboken, NJ: Wiley

Meeus, W., Iedema, J., Maassen, G., & Engels, R. (2005). Separation individuation revisited: On the interplay of parent adolescent relations, identity and emotional adjustment in adolescence. *Journal of Adolescence, 28*, 89–106. doi:10.1016/j.adolescence.2004.07.003.

Meisenberg, G., & Woodley, M. A. (2015). Gender differences in subjective well-being and their relationships with gender equality. *Journal of Happiness Studies, 16*, 1539–1555. doi: 10.1007/s10902- 014-9577-5

Moretti, M. M., & Peled, M. (2004). Adolescent-parent attachment: Bonds that support healthy development. *Paediatrics & Child Health*, 9(8), 551–555.

Murphy, T. P., Laible, D. J., Augustine, M., & Robeson, L. (2015). Attachment's links with adolescents' social emotions: The roles of negative emotionality and emotion regulation. *The Journal of Genetic Psychology*, *176*(5), 315-329.

Nash, R., Patterson, K., Flittner, A., Elmer, S., & Osborne, R. (2021). School-based health literacy programs for children (2-16 years): An international review. *Journal of School Health*, *91*(8), 632-649.

Neville, C. E., Murray, L. J., Boreham, C. A. G., Gallagher, A. M., Twisk, J., Robson, P. J., ... & Smith, G. D. (2002). Relationship between physical activity and bone mineral status in young adults: the Northern Ireland Young Hearts Project. *Bone*, *30*(5), 792-798.

Newland, L. A. (2014). Supportive family contexts: promoting child well-being and resilience. *Early Child Development and Care*, *184*(9-10), 1336-1346.

Newland, L. A., Lawler, M. J., Giger, J. T., Roh, S., & Carr, E. R. (2015). Predictors of children's subjective well-being in rural communities of the United States. *Child Indicators Research, 8*(1), 177-198.

Nucci, L., Hasebe, Y., & Lins-Dyer, M. T. (2005). Adolescent psychological well-being and parental control of the personal. *New Directions for Child and Adolescent Development, 2005*(108), 17-30.

Nurmi, J. E. (2004). Socialization and self-development: Channeling, selection, adjustment, and reflection. In R. M. Lerner & L. Steinberg (Eds.). *Handbook of Adolescent Psychology*. pp. 85-124. New Jersey: Wiley

Obeldobel, C. A., & Kerns, K. A. (2021). A literature review of gratitude, parent–child relationships, and well-being in children. *Developmental Review, 61*, 100948.

Oberle, E., Schonert-Reichl, K. A., & Zumbo, B. D. (2011). Life satisfaction in early adolescence: Personal, neighborhood, school, family, and peer influences. *Journal of Youth and Adolescence, 40*(7), 889-901.

Olsson, C. A., McGee, R., Nada-Raja, S., & Williams, S. M. (2013). A 32-year longitudinal study of child and adolescent pathways to well-being in adulthood. *Journal of Happiness Studies, 14*(3), 1069-1083.

Ong, L., Linden, W., & Young, S. (2004). Stress management: what is it? *Journal of Psychosomatic Research, 56*(1), 133-137.

Ong, M. Y., Eilander, J., Saw, S. M., Xie, Y., Meaney, M. J., & Broekman, B. F. (2018). The influence of perceived parenting styles on socio-emotional development from pre-puberty into puberty. *European child & adolescent psychiatry, 27*(1), 37-46.

Opree, S. J., Buijzen, M., & van Reijmersdal, E. A. (2018). Development and validation of the Psychological Well-Being Scale for Children (PWB-c). *Societies, 8*(1), 18.

Owen, K. B., Parker, P. D., Astell-Burt, T., & Lonsdale, C. (2018). Regular physical activity and educational outcomes in youth: a longitudinal study. *Journal of Adolescent Health*, *62*(3), 334-340.

Paulussen-Hoogeboom, M. C., Stams, G. J. J. M., Hermanns, J. M. A., & Peetsma, T. T. D. (2007). Child negative emotionality and parenting from infancy to preschool: A meta-analytic review. *Developmental Psychology, 43*(2), 438–453. https://doi.org/10.1037/0012-1649.43.2.438

Paxton, R. J., Valois, R. F., Huebner, E. S., & Drane, J. W. (2006). Opportunity for adult bonding/meaningful neighborhood roles and life-satisfaction among USA middle school students. *Social Indicators Research*, *79*(2), 291-312.

Pedersen, S., Grønhøj, A., & Thøgersen, J. (2015). Following family or friends. Social norms in adolescent healthy eating. *Appetite*, *86*, 54-60.

Pender, N.J., Murdaugh, C.L. & Parsons, M.A. (2011) Health Promotion in Nursing Practice. 6th Edition, Pearson, Boston.

Peng, J., Yin, L., Wang, K., Zhang, T., Liu, H., Yang, J., & Luo, J. (2022). A study on the relationship between adolescent health behavior, BMI, and blood physical and chemical properties. *Frontiers in Public Health*, *10*, https://doi.org/10.3389/fpubh.2022.766101

Perry, C. L., Story, M., & Lytle, L. A. (1997). *Promoting healthy dietary behaviors.* In R. P. Weissberg, T. P. Gullotta, R. L. Hampton, B. A. Ryan, & G. R. Adams (Eds.), Healthy children 2010: Enhancing children's wellness. Issues in children's and families' lives (Vol. 8, pp. 214-249). Thousand Oaks, CA: Sage.

Phillips, B. M., Lonigan, C. J., Driscoll, K., & Hooe, E. S. (2002). Positive and negative affectivity in children: A multitrait-multimethod investigation. *Journal of Clinical Child and Adolescent Psychology*, *31*(4), 465-479.

Philips, N., Sioen, I., Michels, N., Sleddens, E., & De Henauw, S. (2014). The influence of parenting style on health related behavior of children: findings from the ChiBS study. *International Journal of Behavioral Nutrition and Physical Activity*, *11*(1), 1-14.

Pietromonaco, P. R., DeVito, C. C., Ge, F., & Lembke, J. (2015). *Health and attachment*. In J. A. Simpson, & W. S. Rholes (Eds.) Attachment Theory and Research: New Directions and Emerging Themes. Guilford Press.

Pinquart, M., & Sörensen, S. (2001). Gender differences in self-concept and psychological well-being in old age: A meta-analysis. *Journal of Gerontology: Psychological Sciences*, *56* , 195–P213. doi: 10.1093/geronb/56.4.P195

Pollard, E. L., & Lee, P. D. (2003). Child well-being: A systematic review of the literature. *Social Indicators Research*, *61*(1), 59-78.

Proctor, C. (2014). Enhancing well-being in youth: Positive psychology interventions for education in Britain. In M. J. Furlong, R. Gilman, & E. S. Huebner (Eds.), *Handbook of Positive Psychology in Schools* (2nd ed., pp. 416–432). New York: Routledge

Proctor, C., Linley, P. A., & Maltby, J. (2017). Life satisfaction. In R.J.R. Levesque (Ed.) *Encyclopedia of adolescence*, 1-12. doi: 10.1007/978-3-319-32132-5_125-2

Ragelienė, T., & Grønhøj, A. (2020). The influence of peers′ and siblings′ on children's and adolescents′ healthy eating behavior. A systematic literature review. *Appetite*, *148*, 104592.

Raj, S., Senjam, S. S., & Singh, A. (2013). Assessment of health-promoting behavior and lifestyle of adolescents of a north Indian city. *International Journal of Preventive Medicine*, *4*(10), 1189-1193.

Rask, K., Åstedt-Kurki, P., & Laippala, P. (2002). Adolescent subjective well-being and realized values. *Journal of Advanced Nursing*, *38*(3), 254-263.

Rask, K., Astedt-Kurki, P., Marja-Terttu, T., & Pekka, L. (2002). Relationships Among adolescent subjective well-being, health behavior, and school satisfaction. *Journal of School Health, 72*(6), 243-249.

Repetti, R. L., Taylor, S. E., & Seeman, T. E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin, 128*, 330-366.

Rew, L., Arheart, K. L., Thompson, S., & Johnson, K. (2013). Predictors of adolescents' health-promoting behaviors guided by primary socialization theory. *Journal for Specialists in Pediatric Nursing, 18*(4), 277-288.

Rosenthal, N. L., & Kobak, R. (2010). Assessing adolescents' attachment hierarchies: Differences across developmental periods and associations with individual adaptation. *Journal of Research on Adolescence, 20*, 678-706. doi: 10.1111/j.1532

Ross, D. A., Hinton, R., Melles-Brewer, M., Engel, D., Zeck, W., Fagan, L., ... & Mohan, A. (2020). Adolescent well-being: A definition and conceptual framework. *Journal of Adolescent Health, 67*(4), 472-476.

Rothbart, M. K., Ahadi, S. A., & Evans, D. E. (2000). Temperament and personality: Origins and outcomes. *Journal of Personality and Social Psychology, 78*(1), 122–135. https://doi.org/10.1037/0022-3514.78.1.1227795.2010.00655.x

Rothbart, M. K., & Bates, J. E. (1998). Temperament. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional and personality development (5th ed., pp. 105-176)*. New York: Wiley

Ruhl, H., Dolan, E. A., & Buhrmester, D. (2015). Adolescent attachment trajectories with mothers and fathers: The importance of parent–child relationship experiences and gender. *Journal of Research on Adolescence, 25*(3), 427-442.

Ryff, C. D., Dienberg Love, G., Urry, H. L., Muller, D., Rosenkranz, M. A., Friedman, E. M., et al. (2006). Psychological well-being and ill-being: Do they have distinct or mirrored biological correlates? *Psychotherapy and Psychosomatics, 75,* 85–95. https ://doi.org/10.1159/00009 0892.

Ryff, C. D., & Keyes, C. L. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69,* 719–727. https ://doi.org/10.1037/0022-3514.69.4.719.

Ryff, C. D., & Singer, B. (1996). Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *Psychotherapy and Psychosomatics, 65*(1), 14-23.

Sagone, E., & De Caroli, M. E. (2014). Relationships between psychological well-being and resilience in middle and late adolescents. *Procedia-Social and Behavioral Sciences, 141,* 881-887.

Sarıtaş-Atalar D. & Altan-Atalay A. (2017) Maternal availability and adolescent dependency as moderators on the relation between personality and ER strategies in a Turkish sample, *Personality and Individual Differences, 106,* 190-195. doi: 10.1016/j.paid.2016.11.011.

Scarapicchia, T. M., Sabiston, C. M., Pila, E., Arbour-Nicitopoulos, K. P., & Faulkner, G. (2017). A longitudinal investigation of a multidimensional model of social support and physical activity over the first year of university. *Psychology of Sport and Exercise, 31*, 11-20.

Schofield, T. J., Conger, R. D., Donnellan, M. B., Jochem, R., Widaman, K. F., & Conger, K. J. (2012). Parent personality and positive parenting as predictors of positive adolescent personality development over time. *Merrill-Palmer Quarterly (Wayne State University. Press), 58*(2), 255.

Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research, 99,* 323–338. doi:10.3200/JOER.99.6.323-338

Schuster, T. L., Kessler, R. C., & Aseltine, R. H. (1990). Supportive interactions, negative interactions, and depressive mood. *American Journal of Community Psychology, 18*, 423– 438. doi:10.1007/BF00938116

Schwarz, B., Mayer, B., Trommsdorff, G., Ben-Arieh, A., Friedlmeier, M., Lubiewska, K., ... & Peltzer, K. (2012). Does the importance of parent and peer relationships for adolescents' life satisfaction vary across cultures?. *The Journal of Early Adolescence*, *32*(1), 55-80.

Seibert, A. C., & Kerns, K. A. (2009). Attachment figures in middle childhood. *International Journal of Behavioral Development*, *33*, 347–355.

Seiffge-Krenke, I. (2000). Causal links between stressful events, coping style, and adolescent symptomatology. *Journal of Adolescence, 23*, 675–691.

Selcuk, E., & Ong, A. D. (2013). Perceived partner responsiveness moderates the association between received emotional support and all-cause mortality. *Health Psychology*, *32*, 231-235. doi: 10.1037/a0028276

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, *55*, 5-14. https://doi.org/10.1037/0003-066X.55.1.5

Sen, A. (2005). Human rights and capabilities. *Journal of Human Development*, *6*(2), 151-166.

Shek, D. T. (1997). Family environment and adolescent psychological well-being, school adjustment, and problem behavior: A pioneer study in a Chinese context. *The Journal of Genetic Psychology*, *158*(1), 113-128.

Shek, D. T. (1998). A longitudinal study of the relations between parent-adolescent conflict and adolescent psychological well-being. *The Journal of Genetic Psychology*, *159*(1), 53-67.

Shek, D. T., & Ng, C. S. (2016). Longitudinal research design in adolescent developmental research. *International Journal on Disability and Human Development*, *15*(4), 349-358.

Sijtsema, J. J., Oldehinkel, A. J., Veenstra, R., Verhulst, F. C., & Ormel, J. (2014). Effects of structural and dynamic family characteristics on the development of depressive and aggressive problems during adolescence. The TRAILS study. *European Child and Adolescent Psychiatry, 23,* 499-513. doi:10.1007/s00787-013-0474-y

Silva, P., Lott, R., Mota, J., & Welk, G. (2014). Direct and indirect effects of social support on youth physical activity behavior. *Pediatric exercise science*, *26*(1), 86-94.

Singer, J. D., Willett, J. B., & Willett, J. B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. Oxford: Oxford University Press.

Siqueira, L., Diab, M., Bodian, C., & Rolnitzky, L. (2000). Adolescents becoming smokers: The roles of stress and coping methods. *Journal of Adolescent Health*, *27*(6), 399-408.

Sirard, J. R., & Pate, R. R. (2001). Physical activity assessment in children and adolescents. *Sports Medicine, 31*(6), 439-454.

Skinner, E. A. & Zimmer-Gembeck, M. J. (2007). Development of coping. *Annual Review of Psychology, 58,* 199-144, doi: 10.1146/annurev.psych.58.110405.085705

Spangler, G., & Zimmermann, P. (1999). Attachment representation and emotional regulation in adolescents: A psychobiological perspective on internal working models. *Attachment and Human Development, 1,* 270–290. doi:10.1080/14616739900134151

Spear, H. J., & Kulbok, P. A. (2001). Adolescent health behaviors and related factors: A review. *Public Health Nursing*, *18*(2), 82-93.

Spear, H. J., & Kulbok, P. (2004). Autonomy and adolescence: A concept analysis. *Public Health Nursing*, *21*(2), 144-152.

Srof, B. J., & Velsor-Friedrich, B. (2006). Health promotion in adolescents: A review of Pender's health promotion model. *Nursing Science Quarterly, 19*(4), 366-373.

Steinberg, L. (2001). We know some things: Parent–adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence, 11*, 1–19. doi:10.1111/1532-7795.00001

Steinberg, L. (2004). Risk-taking in adolescence: what changes, and why?. *Annals of the New York Academy of Sciences*, *1021*(1), 51-58.

Stauder, A. (2020). Selye, Hans. In M. D. Gellman (ed.), *Encyclopedia of Behavioral Medicine*, pp. 2010-2013. Retrieved on July 23th 2022 from https://link.springer.com/content/pdf/10.1007/978-3-030-39903-0_215.pdf

Strauss, R. S., Rodzilsky, D., Burack, G., Colin, M. (2001). Psychosocial correlates of physical activity in healthy children. *Archives of Pediatrics & Adolescent Medicine, 155,* 897-902.

Suldo, S. M., & Huebner, E. S. (2004b). The role of life satisfaction in the relationship between authoritative parenting dimensions and adolescent problem behavior. *Social Indicators Research, 66,* 165–195

Sunar, D. (2002). Change and continuity in the Turkish middle class family. In E. Ozdalga & R. Liljestrom (Eds.), Autonomy and dependence in family: Turkey and Sweden in critical perspective. (pp. 217–238). Swedish Research Institute.

Sümer, N., & Anafarta-Şendağ, M. (2009). Orta çocukluk döneminde ebeveynlere bağlanma,benlik algısı ve kaygı. *Türk Psikoloji Dergisi*, 24, 86-101.

Sümer, N., & Güngör, D. (1999). Çocuk yetiştirme stillerinin bağlanma stilleri, benlik değerlendirmeleri ve yakın ilişkiler üzerindeki etkisi [The impact of perceived parenting styles on attachment styles, self-evaluations and close relationships]. *Türk Psikoloji Dergisi*, *14*(44), 35-58.

Sümer, N., & Kağitçibaşi, Ç. (2010). Culturally relevant parenting predictors of attachment security: Perspectives from Turkey. In P. Erdman & K.-M. Ng (Eds.), *Attachment: Expanding the cultural connections* (pp. 157–179). Routledge/Taylor & Francis Group.

Tambalis, K. D., Panagiotakos, D. B., Psarra, G., & Sidossis, L. S. (2018). Association between fast-food consumption and lifestyle characteristics in Greek children and adolescents; results from the EYZHN (National Action for Children's Health) programme. *Public Health Nutrition*, *21*(18), 3386-3394.

Tang, Z., Feng, S., & Lin, J. (2021). Depression and its correlation with social support and health-promoting lifestyles among Chinese university students: A cross-sectional study. *BMJ Open*, *11*(7), e044236. doi: 10.1136/bmjopen-2020-044236.

Thomas, A., & Chess, S. (1977). *Temperament and development*. New York: Brunner/Mazel.

Trainor, S., Delfabbro, P., Anderson, S., & Winefield, A. (2010). Leisure activities and adolescent psychological well-being. *Journal of Adolescence*, *33*(1), 173-186.

Turkish Ministry of Health. (2016). Türkiye Çocukluk Çağı Şişmanlık Araştırması [Turkey Childhood Obesity Research]. Retrieved on July 17, 2022 from https://hsgm.saglik.gov.tr/depo/haberler/turkiye-cocukluk-cagi-sismanlik/COSI-TUR-2016-Kitap.pdf

Turkish Statistics Foundation [Türkiye İstatistik Kurumu – TÜİK]. (2021). İstatistiklerle Kadın, 2021. Retrieved on August 09, 2022 from https://data.tuik.gov.tr/Bulten/Index?p=Istatistiklerle-Kadin-2021-45635

Twenge, J. M., & Campbell, W. K. (2018). Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study. *Preventive Medicine Reports*, *12*, 271-283.

Umberson, D., & Karas Montez, J. (2010). Social relationships and health: A flashpoint for health policy. *Journal of Health and Social Behavior*, *51*(1_suppl), S54-S66.

Varela, J. J., Sirlopú, D., Melipillán, R., Espelage, D., Green, J., & Guzmán, J. (2019). Exploring the influence school climate on the relationship between school violence and adolescent subjective well-being. *Child Indicators Research*, *12*(6), 2095-2110.

Varela, J. J., Sánchez, P. A., González, C., Oriol, X., Valenzuela, P., & Cabrera, T. (2021). Subjective well-being, bullying, and school climate among Chilean adolescents over time. *School Mental Health*, *13*(3), 616-630.

Videon, T. M. (2005). Parent-child relations and children's psychological well-being: Do dads matter?. *Journal of Family Issues*, *26*(1), 55-78.

Viejo, C., Gómez-López, M., & Ortega-Ruiz, R. (2018). Adolescents' psychological well-being: A multidimensional measure. *International Journal of Environmental Research and Public Health*, *15*(10), Article no 2325, 1-22.

Viner, R., & Macfarlane, A. (2005). ABC of adolescence: Health promotion. *BMJ*, *330*(7490), 527-529.

Walker, S. N., & Hill-Polerecky, D. M. (1996). Psychometric evaluation of the health-promoting lifestyle profile II. *Unpublished manuscript, University of Nebraska Medical Center*, 120-26.

Walker, S. N., Sechrist, K. R., & Pender, N. J. (1987). The health-promoting lifestyle profile: development and psychometric characteristics. *Nursing Research*, *36*(2), 76-81.

Waters, S. F., Virmani, E. A., Thompson, R. A., Meyer, S., Raikes, H. A., & Jochem, R. (2010). Emotion regulation and attachment: Unpacking two constructs and their association. *Journal of Psychopathology and Behavioral Assessment*, *32*(1), 37-47. doi:10.1007/s10862-009-9163-z

Watson, K. H., Dunbar, J. P., Thigpen, J., Reising, M. M., Hudson, K., McKee, L., ... & Compas, B. E. (2014). Observed parental responsiveness/warmth and children's coping: Cross-sectional and prospective relations in a family depression preventive intervention. *Journal of Family Psychology*, *28*(3), 278.

Weichold, K., Büttig, S., & Silbereisen R.K. (2008). Effects of pubertal timing on communication behaviors and stress reactivity in young women during conflict discussions with their mothers. *Journal of Youth and Adolescence*, *37*, 1123-1133. doi:10.1007/s10964-007-9260-9

Welch, J. D., Ellis, E. M., Green, P. A., & Ferrer, R. A. (2019). Social support, loneliness, eating, and activity among parent–adolescent dyads. *Journal of Behavioral Medicine*, *42*(6), 1015-1028.

Wilkinson, R. B. (2004). The role of parental and peer attachment in the psychological health and self-esteem of adolescents. *Journal of Youth and Adolescence*, *33*, 479–493.

Williams, S., & McGee, R. (1991). Adolescents' self-perceptions of their strengths. *Journal of Youth and Adolescence*, *20*(3), 325-337.

World Health Organization (WHO). (2016/2022). Obesity. Retrieved on July 17, 2022 from https://www.who.int/health-topics/obesity#tab=tab_1

World Health Organization (WHO). (2018). *Global action plan on physical activity 2018-2030: More active people for a healthier world.* Retrieved on 2022, May 29 from https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf?sequence=1&isAllowed=y

World Health Organization (WHO). (2020a). *Physical Activity*. Retrieved on 2022, May 23 from https://www.who.int/news-room/fact-sheets/detail/physical-activity

World Health Organization (WHO). (2020b). *Healthy eating*. Retrieved on 2022, May 23 from https://www.who.int/news-room/fact-sheets/detail/healthy-diet

World Health Organization (WHO). (2022a). *85% of adolescent girls don't do enough physical activity: New WHO study calls for action.* Retrieved on 2022, May 29 from https://www.euro.who.int/en/health-topics/disease-prevention/physical-activity/news/news/2022/3/85-of-adolescent-girls-dont-do-enough-physical-activity-new-who-study-calls-for-action

World Health Organization (WHO). (2022b). *Health Promotion*. Retrieved on 2022, May 11 from https://www.who.int/westernpacific/about/how-we-work/programmes/health-promotion

Xiang, G., Li, Q., Du, X., Liu, X., Xiao, M., & Chen, H. (2022). Links between family cohesion and subjective well-being in adolescents and early adults: The mediating role of self-concept clarity and hope. *Current Psychology*, *41*, 76-85. https://doi.org/10.1007/s12144-020-00795-0

Yaban, H., Sayıl, M., & Kındap Tepe, Y. (2013). Erkek ergenlerde anne babadan algılanan destek ile akran zorbalığı arasındaki ilişkide arkadaşlık niteliğinin rolü. *Türk Psikoloji Dergisi, 28 (71),* 20-32.

Yang, A., Wang, D., Li, T., Teng, F., & Ren, Z. (2008). The impact of adult attachment and parental rearing on subjective well-being in Chinese late adolescents. *Social Behavior and Personality: An International Journal*, *36*(10), 1365-1378.

Yap, S. T., & Baharudin, R. (2016). The relationship between adolescents' perceived parental involvement, self-efficacy beliefs, and subjective well-being: A multiple mediator model. *Social Indicators Research*, *126*(1), 257-278.

Young, A. F., Powers, J. R., & Bell, S. L. (2006). Attrition in longitudinal studies: who do you lose?. *Australian and New Zealand journal of public health*, *30*(4), 353-361.

Zimmer-Gembeck, M. J., & Locke, E. M. (2007). The socialization of adolescent coping behaviours: Relationships with families and teachers. *Journal of adolescence*, *30*(1), 1-16.

Zimmer-Gembeck, M. J., & Skinner, E. A. (2011). The development of coping across childhood and adolescence: An integrative review and critique of research. *International Journal of Behavioral Development, 35*(1), 1-17.

Zuckerman, M. (2012). Models of adult temperament. In M. Zentner & R. L. Shiner (Eds). *Handbook of Temperament* (pp.41-68). Guilford Press: New York.

APPENDICES

A. PARENTAL CONSENT FORM

Değerli Velilerimiz,

Bu çalışma Orta Doğu Teknik Üniversitesi Gelişim Psikolojisi Doktora Programı öğrencisi Uzman Psikolog Seren Güneş tarafından Prof. Dr. Sibel Kazak Berument danışmanlığında yürütülmektedir. Çalışmanın amacı ergenlik döneminde bireylerin esenlik (iyi oluş) ve fiziksel sağlığı korumaya yönelik davranışların yordayıcılarını ortaya koymak ve bu davranışlardaki değişimleri tespit etmektir. Bu kapsamda, siz annelerimizden ve çocuklarınızdan 6 ay aralıklarla, toplamda 3 kez bazı anketleri doldurmanızı rica ediyoruz.

Çalışma, iki kısımdan oluşmaktadır. Birinci kısımda, çalışmaya katılmayı kabul eden **annelerin** aileleri hakkında demografik bilgiler vermeleri ve çocukları hakkında mizaç, esenlik (iyi oluş) ve fiziksel sağlık davranışları hakkındaki anketleri doldurmaları beklenmektedir.

İkinci kısımda ise, çalışmaya katılmayı kabul eden annelerin **çocukları,** benzer sorulardan oluşan anketleri dolduracaklardır. Öğrenciler anketleri, okul saatinden okul yönetiminin uygun gördüğü yer ve zamanlarda dolduracaktır. Kimlik bilgileriniz gizli tutulacak ve toplanan bilgiler sadece bilimsel çalışmalarda kullanılacaktır. Çalışma, aynı kişilerden üç kez data toplanmasına dayalı olduğundan, formların başında sizin ve çocuğunuzun ismi sorulmaktadır. Bu isimler sadece formları eşleştirme amacıyla toplanmaktadır.

Çalışmamız ODTÜ Etik Kurulu ve Ankara İl Milli Eğitim Müdürlüğü tarafından onaylanmıştır.

Çalışmayla ilgili sorularınızı Uzman Psikolog Seren Güneş'e (seren.gunes@metu.edu.tr) iletebilirsiniz.

Çalışmaya katılımınız ve desteğiniz için teşekkür ederiz.

☐ ***"Çalışmaya gönüllü olarak katılıyorum ve çocuğumun çalışmaya katılmasına izin veriyorum."***

Veli ad-soyad: İmza: _____ Tarih: _____

Öğrenci ad-soyad: _____

☐ ***"Çalışmaya katılmak istemiyorum ve çocuğumun çalışmaya katılmasına izin vermiyorum."***

Veli ad-soyad: İmza: _____ Tarih: _____

Öğrenci ad-soyad: _____

B. DEMOGRAPHICAL INFORMATION FORM

Demografik Bilgi Formu

Açıklama: Aşağıda size ve ailenize dair bilgiler vermeniz istenmektedir. Lütfen sizden istenen bilgileri dikkatlice okuyun. Size uygun olan bilgiler için "X" (çarpı) işareti koyun.

1)Yaşınız:_____

2)Eğitim Durumunuzuz:

__ Okur-yazar değil __Okur-yazar __İlköğretim mezunu __Lise mezunu
__ Üniversite mezunu __ Yüksek lisans __Doktora ve üzeri

3)Çalışma durumunuz:

__ Çalışmıyorum ___ Yarı zamanlı çalışıyorum __ Tam zamanlı çalışıyorum (İşiniz: _____)

4)Medeni durumunuz:

__ Evliyim __Boşandım __Eşim vefat etti.___ Diğer (Lütfen açıklayın: _____)

*Çocuğunuzun **babasının** eğitim düzeyi:

__ Okur-yazar değil __Okur-yazar __İlköğretim mezunu __Lise mezun
__ Üniversite mezunu __ Yüksek lisans __Doktora ve üzeri

5) Sizin Boyunuz: _____ Kilonuz:_____

6) Çocuğunuzun babasının boyu: _____ kilosu: _____

7) Çocuğunuz /Çocuklarınız:

Doğum sırası	**Doğum Tarihi**	**Cinsiyeti**	**Okul / iş durumu**	**Aynı evde mi yaşıyorsunuz?**
1. çocuk				
2. çocuk				
3. çocuk				
4. çocuk				

8) Bu çalışmadaki sorulara *hangi çocuğunuzu düşünerek* cevap veriyorsunuz?

(Lütfen doğum sırasını yazınız.) _____

9) Ailenizin aylık toplam geliri:

O Asgari ücretten (1603 TL) az. **O** 1603 - 2500 TL **O** 2500 – 4000 TL
O 4000 – 6000 TL **O** 6000 – 8000TL **O** 8000 - 10000 TL **O** 10000TL ve üzeri

C. NEGATIVE AFFECTIVITY

	Lütfen aşağıdaki cümleleri çocuğunuzu düşünerek okuyunuz. Her bir cümlenin karşısına, çocuğunuza uyan kısma (X) çarpı işareti koyunuz.	**0.Hiçbir zaman**	**1.Nadiren**	**2.Genellikle**	**3.Çoğu zaman**	**4.Her zaman**
1	Çocuğum çok hoşuna gidern bir şeyi yaparken, onu bırakmak zorunda kalırsa gerilir, sinirlenir.	0	1	2	3	4
2	Çocuğum ödevlerinde bir hata yaptığında gerilir, sinirlenir.	0	1	2	3	4
3	Başka öğrencilerin (çocukların) – "yaşıtlarının" yaptığı küçük şeylere bile sinir olur.	0	1	2	3	4
4	Biri onu eleştirdiğinde çok gerilir.	0	1	2	3	4
5	Onu gitmek istediği bir yere götürmezsem, gerilir, sinirlenir.	0	1	2	3	4
6	İnsanların onunla aynı fikirde olmamasından nefret eder.	0	1	2	3	4
7	Arkadaşları ondan daha keyifli ve mutlu gibidirler.	0	1	2	3	4
8	Çoğunlukla azıcık bir şey bile onu ağlamaklı yapmaya yeter.	0	1	2	3	4
9	Aslında başkalarının fark ettiğinden daha çok üzülür.	0	1	2	3	4
10	Hayatında birçok şey ters gitse bile, neredeyse hiç üzülmez.	0	1	2	3	4
11	Eğlenmesi / keyif alması beklendiği zamanlarda bile (örneğin gezide ya da yılbaşı partisinde) kendisini üzgün hisseder.	0	1	2	3	4
12	Eğer birine kızarsa, onun duygularını inciteceğini bildiği halde, onu incitecek şeyler söyleyebilir.	0	1	2	3	4
13	Eğer birine gerçekten kızarsa, ona vurabilir.	0	1	2	3	4
14	Hoşlanmadığı insanlara karşı kaba davranabilir	0	1	2	3	4
15	Kızgın olduğu zaman, kapıları çarpar.	0	1	2	3	4

Anketlerimiz burada sona ermektedir.
Emeğiniz ve sabrınız için teşekkür ederiz.
Bilim ve eğitime yaptığınız katkılar için teşekkür ederim,

Saygı ve sevgilerimle,
Uzman Gelişim Psikologu Seren Güneş

D. STUDENT CONSENT/INFORMATION FORM

Sevgili Genç Arkadaşım,

Benim adım Seren, ODTÜ Psikoloji Bölümü'nde okuyorum. Okulumdaki ödevlerin bir parçası olarak, senin yaşlarındaki gençlerin sağlık davranışları, yaşam kaliteleri ve aileleriyle ilişkilerini inceleyen bir ödev yapıyorum.

Senden ricam aşağıdaki soruları doldurman ☺ Her bölüm değişik davranışlar hakkında cümlelerden oluşuyor. Doğru ya da yanlış cevap yok. Tüm cümlelere sana en uygun işaretleri koyarsan sevinirim.

Bu ödevin bir amacı da, gençlerdeki değişimleri takip edebilmek. Bunun için 6 ay sonra tekrar gelip, senden ve velinden aynı anketleri doldurmanı rica edeceğim. Senin bireysel bilgilerin hiçbir yerde kullanılmayacak, sadece 6 sonra dolduracağın anketi şimdiki anketinle eşleştirmek amacıyla kullanılacaktır.

Bu ödev Ankara İl Milli Eğitim Müdürlüğü tarafından onaylanmıştır.

Yardım ve desteklerin için şimdiden teşekkür ederim!

Sevgilerimle,

Seren

Adı & Soyadı: _____

Sınıfı: _____

E. PSYCHOLOGICAL WELL-BEING

Lütfen aşağıdaki cümleleri dikkatlice oku ve sana en yakın gelen seçeneği işaretle. Teşekkürler! ☺

Ne sıklıkla … ?		**Hiç**	**Nadiren**	**Bazen**	**Çok sık**
1	Ne sıklıkla okuldan sonra ne yapacağını seçersin?	0	1	2	3
2	Ne sıklıkla hafta sonları ne yapacağını seçersin?	0	1	2	3
3	Ne sıklıkla televizyonda ne izleyeceğini seçersin?	0	1	2	3
4	Ne sıklıkla bilgisayarı ne zaman kullanacağını seçersin?	0	1	2	3
5	Ne sıklıkla yeni aktivitelere başlamak istersin?	0	1	2	3
6	Ne sıklıkla okulda yeni şeyler öğrenmek hoşuna gider?	0	1	2	3
7	Ne sıklıkla yeni insanlarla tanışmak hoşuna gider?	0	1	2	3
8	Ne sıklıkla yeni yerleri ziyaret etmek hoşuna gider?	0	1	2	3
9	Ne sıklıkla büyüyünce, gelecekte ne olacağı hakkında düşünürsün?	0	1	2	3
10	Ne sıklıkla gelecekte nerede yaşamak istediğin hakkında düşünürsün?	0	1	2	3
11	Ne sıklıkla lise ya da üniversite hakkında düşünürsün?	0	1	2	3
12	Ne sıklıkla kendinle gurur duyarsın?	0	1	2	3
13	Ne sıklıkla özgüvenli (kendine güveni yüksek) hissedersin?	0	1	2	3
14	Ne sıklıkla kendini beğenirsin / seversin?	0	1	2	3
15	Ne sıklıkla kendinden mutlusun?	0	1	2	3
16	Ne sıklıkla olduğun kişiden memnunsun?	0	1	2	3
17	Ne sıklıkla kendi seçimlerini yaparsın?	0	1	2	3
18	Ne sıklıkla anne & babana, onların fikirlerini sorarsın?	0	1	2	3
19	Ne sıklıkla anne & babandan yardım istersin?	0	1	2	3
20	Ne sıklıkla arkadaşlarınla eğlenceli şeyler yaparsın?	0	1	2	3
21	Ne sıklıkla arkadaşlarına yardım edersin?	0	1	2	3
22	Ne sıklıkla anne & babanla eğlenceli şeyler yaparsın?	0	1	2	3
23	Ne sıklıkla anne & babanla tartışırsın?	0	1	2	3
24	Ne sıklıkla anne & babana yardım edersin?	0	1	2	3

F. SUBJECTIVE WELL-BEING

Öğrenciler için Yaşam Kalitesi Ölçeği

Aşağıda bir öğrencinin kendi hayatıyla ilgili olası düşünceleri verilmiştir.

Lütfen aşağıdaki cümleleri için her cümelnin karşına size uygun sayıyı işaretleyin.

0.Hiç Katılmıyorum 1.Genellikle katılmıyorum. 2.Biraz katılmıyorum. 3.Biraz katılıyorum. 4.Genellikle katılıyorum. 5.Her zaman katılıyorum.	**0.Hiç Katılmıyorum**	**1.Genellikle katılmıyorum**	**2.Biraz katılmıyorum**	**3.Biraz katılıyorum**	**4.Genellikle katılıyorum**	**5.Hep katılıyorum**
1.Hayatım iyi gidiyor.	**0**	**1**	**2**	**3**	**4**	**5**
2.Hayatım tam olması gerektiği gibi.	**0**	**1**	**2**	**3**	**4**	**5**
3.Hayatımdaki birçok şeyi değiştirmek isterdim.	**0**	**1**	**2**	**3**	**4**	**5**
4.Başka türlü bir hayatım olmasını dilerdim.	**0**	**1**	**2**	**3**	**4**	**5**
5.İyi bir hayatım var.	**0**	**1**	**2**	**3**	**4**	**5**
6.Hayatta istediğim her şeye sahibim.	**0**	**1**	**2**	**3**	**4**	**5**
7.Hayatım başka çocukların / gençlerin hayatından daha iyi.	**0**	**1**	**2**	**3**	**4**	**5**

G. HEALTH PROMOTING BEHAVIORS

Öğrenciler için Sağlık Davranışları Ölçeği

Bu anket bireylerin yaşam şekli ve kişisel alışkanlıklarıyla ilgili cümlelerden oluşmaktadır.

Aşağıdaki davranışları okuyup, davranışların hangi yoğunlukta olduğunu belirtmek için 1 ile 4 arasındaki ölçekten sana uygun olanı işaretleyiniz.

	0= Hiçbir zaman, 1= Bazen, 2= Çoğu zaman, 3= Her zaman	**Hiçbir zaman**	**Bazen**	**Çoğu zaman**	**Her zaman**
1	Düzenli olarak spor yaparım.	0	1	2	3
2	Haftada en az 3 kere 20 ya da daha fazla dakika güce dayalı egzersiz yaparım (tempolu yürüyüş, bisiklet, aerobik gibi...)	0	1	2	3
3	Hafif ile orta zorlukta fiziksel aktivite yaparım (Örneğin haftada 5 gün veya daha fazla 30-40 dakikalık yürüyüşler).	0	1	2	3
4	Boş zamanlarımda eğlenceli (yüzme, dans, bisiklet gibi) fiziksel aktivitelerde bulunurum.	0	1	2	3
5	Haftada en az 3 kez esneme egzersizleri yaparım.	0	1	2	3
6	Günlük aktivitelerim sırasında egzersiz yaparım (asansöre binmek yerine merdiven çıkmak, öğle tatilinde yürümek, tenefüslerde bahçeye çıkmak, kısa mesafelere araçla değil yürüyerek gitmek gibi...).	0	1	2	3
7	Spor yaparken nabzımı ölçerim.	0	1	2	3
8	Egzersiz yaparken hedeflediğim nabza ulaşırım.	0	1	2	3
9	Kendimde olağandışı bir belirti ya da sempton gördüğümde doktora yada sağlık uzmanına gitmek isterim.	0	1	2	3
10	Sağlıklı yaşam hakkında okur ya da tv programları izlerim.	0	1	2	3
11	Doktorun söylediklerini anlamazsam, doktora sorular sorarım.	0	1	2	3
12	Doktorun tavsiyesi hakkında şüphem varsa ikinci bir uzman görüşü almak isterim.	0	1	2	3
13	Sağlığımla ilgili merak ettiklerimi doktorlarla konuşurum.	0	1	2	3
14	Vücudumda tehlike göstergesi olabilecek fiziksel değişiklikleri farkedebilmek için ayda en az 1 kere vücudumu incelerim.	0	1	2	3
15	Kendime nasıl daha iyi bakabileceğim konusunda doktorlardan bilgi isterim.	0	1	2	3
16	Kişisel sağlık bakımı ile ilgili eğitici etkinliklere katılırım.	0	1	2	3
17	Az yağlı, doymuş yağ oranı ve kolestrol oranı düşük besinler tercih ederim.	0	1	2	3
18	Şeker ve şekerli yiyeceklerin tüketimini azaltırım.	0	1	2	3
19	Hergün toplamda 6-11 porsiyon (500-1000 gram) ekmek, tahıl, pirinç ya da makarna tüketirim.	0	1	2	3

20	Her gün meyve yerim.	0	1	2	3
21	Her gün sebze yerim.	0	1	2	3
	Öğrenciler için Sağlık Davranışları Ölçeği 'nin devamıdır.				
	0= Hiçbir zaman, **1= Bazen,** **2= Çoğu zaman,** **3= Her zaman**	**Hiçbir zaman**	**Bazen**	**Çoğu zaman**	**Her zaman**
22	Her gün toplamda yarım ile bir kilo arasında süt, yoğurt veya peynir tüketirim.	0	1	2	3
23	Her gün s 2-3 tabak (150-225 gram) et, tavuk, balık, kuru fasulye, yumurta ve fındık fıstık yerim.	0	1	2	3
24	Paketli yiyeceklerin üzerindeki besin, yağ ve sodyum oranlarını öğrenmek için etiketlerini okurum.	0	1	2	3
25	Her gün kahvaltı ederim.	0	1	2	3
26	Yeteri kadar uyurum.	0	1	2	3
27	Her gün rahatlama ve gevşeme egzersizleri yaparım.	0	1	2	3
28	Hayatımda değiştiremeyeceği şeyleri kabul ederim.	0	1	2	3
29	Uyku zamanı güzel düşüncelere konsantre olurum.	0	1	2	3
30	Stresimi kontrol etmek için özel yöntemler kullanırım.	0	1	2	3
31	Okul ve eğlenceye dengeli vakit ayırırım.	0	1	2	3
32	Hergün 15- 20 dakika gevşeme egzersizleri ya da meditasyon yaparım.	0	1	2	3
33	Yorulmamak için gün içindeki hızımı ayarlarım.	0	1	2	3

H. PARENTAL WARMTH/ACCEPTANCE/CARE-MOTHER FORM

Açıklama:	**Annem**				
Aşağıda, *anneniz* olan ilişkiniz hakkında cümleler verilmiştir. Lütfen her bir cümleyi, *anneniz* için değerlendirin.	**Hiç doğru değil (0)**	**Doğru değil (1)**	**Kısmen doğru (2)**	**Doğru (3)**	**Çok doğru (4)**
1. Annem benimle sık sık rahatlatıcı bir şekilde konuşur.	0	1	2	3	4
2. Nasıl davranacağım ya da ne yapacağım konusunda bana hep yararlı fikirler vermiştir	0	1	2	3	4
3. Sorunlarım olduğunda onları daha açık bir şekilde görmemde hep yardımcı olmuştur	0	1	2	3	4
4. Sorunlarımı çözmemde destek olur.	0	1	2	3	4
5. Sevgi ve yakınlığına her zaman güvenirim	0	1	2	3	4
6. Hiçbir zaman fazla yakın bir ilişkimiz olmadı	0	1	2	3	4
7. Bir problemim olduğunda ona anlatmaktansa, kendime saklamayı tercih ederim	0	1	2	3	4
8. Onunla birbirimize çok bağlıyız	0	1	2	3	4
9. Onun düşüncelerine ters gelen bir şey yaptığımda suçlamaz	0	1	2	3	4
10. Bir sorunum olduğunda bunu hemen anlar	0	1	2	3	4
11. Hiçbir zaman benim ne hissettiğimle veya ne düşündüğümle gerçekten ilgilenmedi	0	1	2	3	4

I. PARENTAL WARMTH/ACCEPTANCE/CARE-FATHER FORM

Açıklama:	**Babam**				
Aşağıda, *babanızla* olan ilişkiniz hakkında cümleler verilmiştir. Lütfen her bir cümleyi, *babanız* için değerlendirin.	**Hiç doğru değil (0)**	**Doğru değil (1)**	**Kısmen doğru (2)**	**Doğru (3)**	**Çok doğru (4)**
1. Babam benimle sık sık rahatlatıcı bir şekilde konuşur.	0	1	2	3	4
2. Nasıl davranacağım ya da ne yapacağım konusunda bana hep yararlı fikirler verir. miştir	0	1	2	3	4
3. Sorunlarım olduğunda onları daha açık bir şekilde görmemde hep yardımcı olur.	0	1	2	3	4
4. Sorunlarımı çözmemde destek olur.	0	1	2	3	4
5. Sevgi ve yakınlığına her zaman güvenirim.	0	1	2	3	4
6. Hiçbir zaman fazla yakın bir ilişkimiz olmadı	0	1	2	3	4
7. Bir problemim olduğunda ona anlatmaktansa, kendime saklamayı tercih ederim.	0	1	2	3	4
8. Babamla birbirimize çok bağlıyiz.	0	1	2	3	4
9. Onun düşüncelerine ters gelen bir şey yaptığımda suçlamaz.	0	1	2	3	4
10. Bir sorunum olduğunda bunu hemen anlar.	0	1	2	3	4
11. Babam hiçbir zaman benim ne hissettiğimle veya ne düşündüğümle gerçekten ilgilenmez.	0	1	2	3	4

J. PARENTAL AUTONOMY SUPPORT-MOTHER FORM

	Anne Anketi **Lütfen aşağıdaki cümleleri dikkatlice okuyun.** **Yanda verilen seçeneklerden en uygun olana (X) çarpı işareti koyun.** **Teşekkürler ☺**	**Hiç doğru değil (0)**	**Doğru değil (1)**	**Kısmen doğru (2)**	**Doğru (3)**	**Cok doğru (4)**
1	Annem benim hakkımda önemli kararlar alırken, benim görüşüm onun için önemlidir.	0	1	2	3	4
2	Annem kendi tercihi ne olursa olsun, kendi ilgi ve isteklerime göre seçim yapacağımı umar.	0	1	2	3	4
3	Annem, belirli sınırlar çerçevesinde, kendi aktivitelerimi seçmem için bana özgürlük tanır.	0	1	2	3	4
4	Annem ne yapacağıma karar vermem için bana birçok fırsat tanır.	0	1	2	3	4
5	Annem neden bazı şeyleri yasakladığını, benim anlamamı sağlar.	0	1	2	3	4
6	Anneme bir şeyi neden yapmak ya da yapmamak zorunda olduğumu sorduğumda, bana ikna edici sebepler verir.	0	1	2	3	4
7	Bir şeyi yapmama izin verilmediğinde, sebebini bilirim	0	1	2	3	4
8	Annem benden bir şey istediğinde, neden istediğini açıklar.	0	1	2	3	4
9	Annem, kendini benim yerime koyup duygularımı anlar.	0	1	2	3	4
10	Annem onunla aynı fikirde olmadığımda, benim görüşümü dinler.	0	1	2	3	4
11	Kendisininkinden farklı olsa bile, annem benim duygu ve düşüncelerime açıktır.	0	1	2	3	4
12	Annem beni kendim olmam için cesaretlendir.	0	1	2	3	4

K. PARENTAL AUTONOMY SUPPORT-FATHER FORM

	Baba Anketi **Lütfen aşağıdaki cümleleri dikkatlice oku.** **Yanda sana verilen seçeneklerden kendine en uygun olana (X) çarpı işareti koy.** **Teşekkürler ☺**	**Hiç doğru değil (0)**	**Doğru değil (1)**	**Kısmen doğru (2)**	**Doğru (3)**	**Çok doğru (4)**
1	Babam benim hakkımda önemli kararlar alırken, benim görüşüm onun için önemlidir.	0	1	2	3	4
2	Babam kendi tercihi ne olursa olsun, kendi ilgi ve isteklerime göre seçim yapacağımı umar.	0	1	2	3	4
3	Babam, belirli sınırlar çerçevesinde, kendi aktivitelerimi seçmem için bana özgürlük tanır.	0	1	2	3	4
4	Babam ne yapacağıma karar vermem için bana birçok fırsat tanır.	0	1	2	3	4
5	Babam neden bazı şeyleri yasakladığını, benim anlamamı sağlar.	0	1	2	3	4
6	Babam bir şeyi neden yapmak ya da yapmamak zorunda olduğumu sorduğumda, bana ikna edici sebepler verir.	0	1	2	3	4
7	Bir şeyi yapmama izin verilmediğinde, sebebini bilirim	0	1	2	3	4
8	Babam benden bir şey istediğinde, neden istediğini açıklar.	0	1	2	3	4
9	Babam, kendini benim yerime koyup duygularımı anlar.	0	1	2	3	4
10	Babam onunla aynı fikirde olmadığımda, benim görüşümü dinler.	0	1	2	3	4
11	Kendisininkinden farklı olsa bile, babam benim duygu ve düşüncelerime açıktır.	0	1	2	3	4
12	Babam beni kendim olmam için cesaretlendir.	0	1	2	3	4

Anketlerimiz burada bitmiştir. Emeklerin için çok teşekkür ediyorum ☺ Çalışamanın bütünlüğü için gelecek dönemlerdeki anketleri de doldurmanı rica ediyorum.

6 ay sonra görüşmek üzere, derslerinde ve hayatta başarılar!

L. PARENTAL RESPONSIVENESS – MOTHER FORM

Anne Anketi: **Lütfen aşağıdaki cümleleri tek tek okuyun.** **Yan tarafta, o cümle için size en uygun seçeneğe (X) çarpı koyun. Teşekkürler ☺**	**Hiç doğru değil (0)**	**Doğru değil (1)**	**Kısmen doğru (2)**	**Doğru (3)**	**Çok doğru (4)**
1.Annem ona sorunlarımdan bahsetmemden hoşlanmaz.	0	1	2	3	4
2.Annem beni nadiren över.	0	1	2	3	4
3.Bir sorunum olduğu zaman annemin bana yardım edeceğine güvenebilirim.	0	1	2	3	4
4.Annem konuşurak zaman geçirir.	0	1	2	3	4
5.Annemle eğlenceli şeyler yaparız.	0	1	2	3	4
6.Annemin beni anladığını hissederim.	0	1	2	3	4
7.Annemin yeteneklerime ve görüşlerime değer verdiğini hissederim.	0	1	2	3	4
8.Annemin benimle gerçekten ilgilendiğini hissederim.	0	1	2	3	4

M. PARENTAL RESPONSIVENESS – FATHER FORM

Baba Anketi: **Lütfen aşağıdaki cümleleri tek tek okuyun.** **Yan tarafta, o cümle için size en uygun seçeneğe (X) çarpı koyun. Teşekkürler ☺**	**Hiç doğru değil (0)**	**Doğru değil (1)**	**Kısmen doğru (2)**	**Doğru (3)**	**Çok doğru (4)**
1.Babam ona sorunlarımdan bahsetmemden hoşlanmaz.	0	1	2	3	4
2.Babam beni nadiren över.	0	1	2	3	4
3.Bir sorunum olduğu zaman babamın bana yardım edeceğine güvenebilirim.	0	1	2	3	4
4.Babamla konuşurak zaman geçiririz.	0	1	2	3	4
5.Babamla eğlenceli şeyler yaparız.	0	1	2	3	4
6.Babamın beni anladığını hissederim.	0	1	2	3	4
7.Babamın yeteneklerime ve görüşlerime değer verdiğini hissederim.	0	1	2	3	4
8.Babamın benimle gerçekten ilgilendiğini hissederim.	0	1	2	3	4

N. ATTACHMENT SECURITY-MOTHER FORM

Aşağıda karşıt cümlelerden oluşan bir anket bulunmaktadır.Senden istediğimiz; ***Önce,*** hangi cümlenin seni daha çok yansıttığına karar vermen, ***Sonra,*** bu durumun sana ne kadar benzediğine karar vermendir ☺

1	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar annelerine kolayca güvenirler.	**AMA**	Bazı çocuklar annelerine güvenip güvenemeyecekleri konusunda emin değildirler	Bana biraz benziyor o	Bana çok benziyor o
2	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar yaptıkları her şeye annelerinin çok karıştığını düşünürler.	**AMA**	Bazı çocuklar kendi başlarına bir şeyler yapmalarına annelerinin izin verdiğini düşünürler.	Bana biraz benziyor o	Bana çok benziyor o
3	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar için annelerinin yardım edeceğine inanmak kolaydır.	**AMA**	Bazı çocuklar için annelerinin yardım edeceğine inanmak zordur.	Bana biraz benziyor o	Bana çok benziyor o
4	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar annelerinin onlarla yeterince zaman geçirdiğini düşünürler.	**AMA**	Bazı çocuklar annelerinin onlarla yeterince zaman geçirmediğini düşünürler.	Bana biraz benziyor o	Bana çok benziyor o
5	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar annelerine ne düşündüklerini veya hissettiklerini söylemekten pek hoşlanmazlar.	**AMA**	Bazı çocuklar annelerine ne düşündüklerini veya hissettiklerini söylemekten hoşlanırlar.	Bana biraz benziyor o	Bana çok benziyor o
6	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar her şeyde annelerine ihtiyaç duymaz.	**AMA**	Bazı çocuklar annelerine hemen hemen her şey için ihtiyaç duyar.	Bana biraz benziyor o	Bana çok benziyor o
7	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar "Keşke anneme daha yakın olabilseydim" derler.	**AMA**	Bazı çocuklar annelerine olan yakınlıklarıyla mutludurlar.	Bana biraz benziyor o	Bana çok benziyor o
8	Bana çok benziyor	Bana biraz benziyor	Bazı çocuklar annelerinin onları gerçekten	**AMA**	Bazı çocuklar annelerinin onları	Bana biraz benziyor	Bana çok benziyor

	o	o	sevmediğinden endişe duyarlar.		sevdiğinden emindirler.	o	o
9	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar annelerinin onları anladığını hissederler.	**AMA**	Bazı çocuklar annelerinin onları anlamadığını hissederler.	Bana biraz benziyor o	Bana çok benziyor o
10	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar annelerinin onları terk etmeyeceğinden gerçekten emindirler.	**AMA**	Bazı çocuklar annelerinin onları terk edebileceğinden bazen endişelenirler.	Bana biraz benziyor o	Bana çok benziyor o
11	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar ihtiyaç duyduklarında annelerinin yanlarında olamayacağını düşünerek endişelenirler.	**AMA**	Bazı çocuklar ihtiyaç duyduklarında annelerinin yanlarında olacağından emindirler.	Bana biraz benziyor o	Bana çok benziyor o
12	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar annelerinin kendilerini dinlemediğini düşünürler.	**AMA**	Bazı çocuklar annelerinin onları gerçekten dinlediğini düşünürler.	Bana biraz benziyor o	Bana çok benziyor o
13	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar üzgün olduklarında annelerinin yanına giderler.	**AMA**	Bazı çocuklar üzgün olduklarında annelerinin yanına pek gitmezler.	Bana biraz benziyor o	Bana çok benziyor o
14	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar "Keşke annem sorunlarımla daha çok ilgilense" derler.	**AMA**	Bazı çocuklar annelerinin onlara yeterince yardım ettiğini düşünürler.	Bana biraz benziyor o	Bana çok benziyor o
15	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar anneleri etrafta olduğunda kendilerini daha iyi hissederler.	**AMA**	Bazı çocuklar anneleri etrafta olduğunda kendilerini daha iyi hissetmezler.	Bana biraz benziyor o	Bana çok benziyor o

O. ATTACHMENT SECURITY-FATHER FORM

Aşağıda karşıt cümlelerden oluşan bir anket bulunmaktadır.Senden istediğimiz; ***Önce,*** hangi cümlenin seni daha çok yansıttığına karar vermen, ***Sonra,*** bu durumun sana ne kadar benzediğine karar vermendir ☺

1	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar babalarına kolayca güvenirler.	**AMA**	Bazı çocuklar babalarına güvenip güvenemeyecek leri konusunda emin değildirler	Bana biraz benziyor o	Bana çok benziyor o
2	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar yaptıkları her şeye babalarının çok karıştığını düşünürler.	**AMA**	Bazı çocuklar kendi başlarına bir şeyler yapmalarına babalarının izin verdiğini düşünürler.	Bana biraz benziyor o	Bana çok benziyor o
3	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar için babalarının yardım edeceğine inanmak kolaydır.	**AMA**	Bazı çocuklar için babalarının yardım edeceğine inanmak zordur.	Bana biraz benziyor o	Bana çok benziyor o
4	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar babalarının onlarla yeterince zaman geçirdiğini düşünürler.	**AMA**	Bazı çocuklar babalarının onlarla yeterince zaman geçirmediğini düşünürler.	Bana biraz benziyor o	Bana çok benziyor o
5	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar babalarına ne düşündüklerini veya hissettiklerini söylemekten pek hoşlanmazlar.	**AMA**	Bazı çocuklar babalarına ne düşündüklerini veya hissettiklerini söylemekten hoşlanırlar.	Bana biraz benziyor o	Bana çok benziyor o
6	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar her şeyde babalarına ihtiyaç duymaz.	**AMA**	Bazı çocuklar babalarına hemen hemen her şey için ihtiyaç duyar.	Bana biraz benziyor o	Bana çok benziyor o
7	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar “Keşke babama daha yakın olabilseydim” derler.	**AMA**	Bazı çocuklar babalarına olan yakınlıklarıyla mutludurlar.	Bana biraz benziyor o	Bana çok benziyor o
8	Bana çok benziyor	Bana biraz benziyor	Bazı çocuklar babalarının onları gerçekten	**AMA**	Bazı çocuklar babalarının onları	Bana biraz benziyor	Bana çok benziyor

	o	o	sevmediğinden endişe duyarlar.		sevdiğinden emindirler.	o	o
9	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar babalarının onları anladığını hissederler.	**AMA**	Bazı çocuklar babalarının onları anlamadığını hissederler.	Bana biraz benziyor o	Bana çok benziyor o
10	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar babalarının onları terk etmeyeceğinden gerçekten emindirler.	**AMA**	Bazı çocuklar babalarının onları terk edebileceğinden bazen endişelenirler.	Bana biraz benziyor o	Bana çok benziyor o
11	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar ihtiyaç duyduklarında babalarının yanlarında olamayacağını düşünerek endişelenirler.	**AMA**	Bazı çocuklar ihtiyaç duyduklarında babalarının yanlarında olacağından emindirler.	Bana biraz benziyor o	Bana çok benziyor o
12	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar babalarının kendilerini dinlemediğini düşünürler.	**AMA**	Bazı çocuklar babalarının onları gerçekten dinlediğini düşünürler.	Bana biraz benziyor o	Bana çok benziyor o
13	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar üzgün olduklarında babalarının yanına giderler.	**AMA**	Bazı çocuklar üzgün olduklarında babalarının yanına pek gitmezler.	Bana biraz benziyor o	Bana çok benziyor o
14	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar “Keşke babam sorunlarımla daha çok ilgilense” derler.	**AMA**	Bazı çocuklar babalarının onlara yeterince yardım ettiğini düşünürler.	Bana biraz benziyor o	Bana çok benziyor o
15	Bana çok benziyor o	Bana biraz benziyor o	Bazı çocuklar babaları etrafta olduğunda kendilerini daha iyi hissederler.	**AMA**	Bazı çocuklar babaları etrafta olduğunda kendilerini daha iyi hissetmezler.	Bana biraz benziyor o	Bana çok benziyor o

P. ETHICAL COMMITTEE PERMISSION

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER

ORTA DOĞU TEKNİK ÜNİVERSİTESİ
MIDDLE EAST TECHNICAL UNIVERSITY

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T: +90 312 210 22 91
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ueam@metu.edu.tr
www.ueam.metu.edu.tr

Sayı: 28620816 / 453

08 AĞUSTOS 2018

Konu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Prof.Dr. Sibel Kazak BERUMENT

Danışmanlığını yaptığınız; doktora öğrencisi Seren GÜNEŞ'in **"Algılanan Ebeveynlik, Mizaç ve Ebeveynlere Bağlanmanın Ergenlerde İyi-Oluş ve Sağlık Davranışları Üzerine Etkisi"** başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek gerekli onay **2018-SOS-163** protokol numarası ile **08.08.2018 - 30.06.2020** tarihleri arasında geçerli olmak üzere verilmiştir.

Bilgilerinize saygılarımla sunarım.

Prof. Dr. Ş. Halil TURAN
Başkan V

Prof. Dr. Ayhan SOL
Üye

Prof. Dr. Ayhan Gürbüz DEMİR
Üye

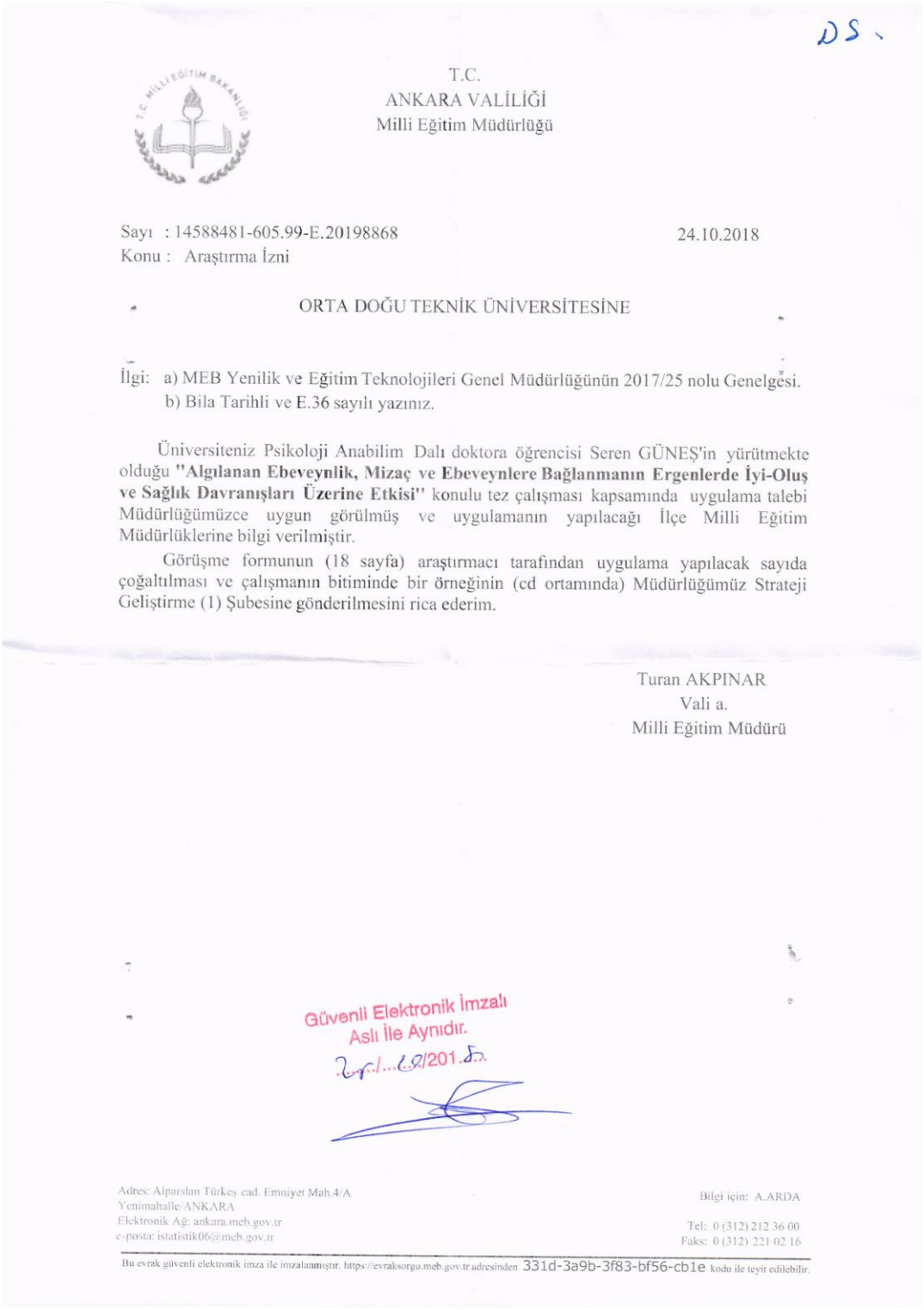
Doç. Dr. Yaşar KONDAKÇI
Üye

Doç. Dr. Zana ÇITAK
Üye

Doç. Dr. Emre SELÇUK
Üye

Dr. Öğr. Üyesi Pınar KAYGAN
Üye

Q. MINISTRY OF EDUCATION PERMISSION



DS.

T.C.
ANKARA VALİLİĞİ
Milli Eğitim Müdürlüğü

Sayı : 14588481-605.99-E.20198868 24.10.2018
Konu : Araştırma İzni

ORTA DOĞU TEKNİK ÜNİVERSİTESİNE

İlgi: a) MEB Yenilik ve Eğitim Teknolojileri Genel Müdürlüğünün 2017/25 nolu Genelgesi.
b) Bila Tarihli ve E.36 sayılı yazınız.

Üniversiteniz Psikoloji Anabilim Dalı doktora öğrencisi Seren GÜNEŞ'in yürütmekte olduğu **"Algılanan Ebeveynlik, Mizaç ve Ebeveynlere Bağlanmanın Ergenlerde İyi-Oluş ve Sağlık Davranışları Üzerine Etkisi"** konulu tez çalışması kapsamında uygulama talebi Müdürlüğümüzce uygun görülmüş ve uygulamanın yapılacağı İlçe Milli Eğitim Müdürlüklerine bilgi verilmiştir.

Görüşme formunun (18 sayfa) araştırmacı tarafından uygulama yapılacak sayıda çoğaltılması ve çalışmanın bitiminde bir örneğinin (cd ortamında) Müdürlüğümüz Strateji Geliştirme (1) Şubesine gönderilmesini rica ederim.

Turan AKPINAR
Vali a.
Milli Eğitim Müdürü

Güvenli Elektronik İmzalı
Aslı İle Aynıdır.
24/10/2018

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R. CURRICULUM VITAE

PERSONAL INFORMATION

Surname, Name: Güneş, Seren

Date and Place of Birth: 03.04.1988, İzmir - Turkey

Email: gunes.seren@gmail.com

ORCID: https://orcid.org/0000-0002-7100-3538

EDUCATION

Degree	Institution	Time
Ph.D.	METU Psychology	2015/09-2022/09
M.Sc.	METU Psychology	2012/09-2015/09
B.Sc.	METU Psychology	2006/09-2011/06
High School	İzmir Kız Lisesi, İzmir	2002/09-2006/06

WORK EXPERIENCE

Time	Place	Position
2022/09-Present	German Red Cross –Refugee Communes, Düsseldorf – Germany	Social Counselor
2022/06-2022/07	LVR Rhineland Regional Association, Youth Services, Solingen – Germany	Psychologist
2021/03-2022/05	Malteser Werke gGmbH – ZUE Neuss Central Refugee Facility, Neuss – Germany	Social Counselor
2020/02-2021/03	University of Wuppertal – Department of Psychology, Wuppertal – Germany	Visiting Researcher
2013/06-2020/06	Middle East Technical University - Department of Psychology, Ankara – Turkey	Research & Teaching Assistant
2013/01-2013/06	Aydin Adnan Menderes University Department of Psychology, Aydin – Turkey	Research & Teaching Assistant
2011/07-2012/12	Special Education Center, Ankara – Turkey	Psychologist

PUBLICATIONS

***Research articles**

Akkaya, S., Okur, Ş., **Güneş, S**., & Berument S. K. (In press). Delays in cognitive, language, and social skill development among preschoolers: A comparison of care types. *Turkish Journal of Psychology (in Turkish)*

Gonul, B., Isik, H., & Güneş, S. (2022). A multigroup analysis of family climate and volunteering: Mediating role of parental conversations in emerging adulthood. *Applied Developmental Science, 26,* 317-328. https://doi.org/10.1080/10888691.2020.1796666

Güneş, S. & Bulut, B. P. (2022). Health anxiety during COVID-19: Predictive roles of health promoting behaviors and sensory processing sensitivity. *The Journal of Psychology: Interdisciplinary and Applied, 156,* 167-184. https://doi.org/10.1080/00223980.2021.2012110

Bozo, Ö., Demirtepe-Saygılı, D., **Güneş, S**., Çenesiz, G. Z., & Baysan, A. (2018). Does problem focused coping buffer the effects of trait anxiety on depressive symptoms of chronic urticaria patients? *Journal of General Psychology, 145,* 64-78. https://doi.org/10.1080/00221309.2017.1420622

***Book Chapters**

Güneş, S. (In press). Grief among refugee children and youth. In C. Arnold & L. Breen (Eds.), International Handbook of Child and Adolescent Losses in Contemporary Context. Publisher: Routledge

Güneş, S. (2021). Değişimin parçası olmak: Çocukluk, ergenlik ve beliren yetişkinlik dönemlerinde sosyal katılım [Being part of the change: Social participation in childhood, adolescence and emerging adulthood]. In H. Işık, B. Gönül, & D. Şakar-Türe (Eds.), *Gelişim Psikolojisi Bakış Açısı ile Toplum İçinde Çocuklar* [*Children in the Society with a Developmental Psychology Perspective*], (pp.63-80). Ankara: Nobel Academic Publishing.

Güneş, S., Memişoğlu-Sanlı, A., & Erel-Gözağaç, S. (2020). Cognitive self-regulation as a key to academic success: Predictors of cognitive self-regulation among children living under social service care and children living with biological families. In Ş. Çinkir (Ed.), *Changing Educational Paradigms: New Methods, Directions, and Policies* (pp. 331-346). Berlin: Peter Lang.

***Manuscripts in Preparation**

Güneş, S. (In preparation). Ikinci Dil Edinimi. [Second Language Acquisition]. In A. Özdes & F. Karaman (Eds.), *Değişen Dünyanın Gelişen Çocukları:Dijital Teknolojinin Çocuk Gelişimi Üzerindeki Etkileri* [Developing Children of the Changin World: The Impact of Digital Technology om *Child Development*], Ankara: Nobel Academic Publishing.

Güneş, S. & Berument, S. K. (In preparation). *Taking a deeper look at parent – adolescent conflict on room management and chores*

Güneş, S., Bozo, Ö., Çenesiz, G. Z., Demirtepe-Saygılı, D., & Baysan, A. (In preparation). *The interplay among type c personality characteristic, health locus of control, and quality of life in chronic urticaria patients.*

***Presentations in Peer-Reviewed International Conferences**

Gonul, B., Işık, H., & **Güneş, S.** (2021, November). Family dynamics in predicting emerging adults' political participation: The roles of family climate, identification with parents and political conversations. Paper presented at 10th Conference on Emerging Adulthood (Online Conference).

Güneş, S. & Bulut, B. P. (2021, July). Subjective well-being in the times of COVID 19: Role of health promoting behaviors among university students. Paper presented at 8th International Eurasian Educational Research Congress (Online Conference).

Memisoglu Sanli, A., Berument, S. K., Erel Gozagaç, S., & **Güneş, S.** (2019, August). Problem behaviors of children under protection: The moderating role of temperament and social support. Paper presented at 19th European Conference on Developmental Psychology, Athens, Greece.

Erel Gözağaç, S., Berument, S. K., Memisoglu Sanli, A., & **Güneş, S.** (2019, August). Academic achievement of children under government protection: Moderating role of temperament and social support. Paper presented at 19th European Conference on Developmental Psychology, Athens, Greece

Güneş, S., Berument, S. K., Erel Gözağaç, S., Memişoğlu Sanlı, M., Aras, A., Tümer, B., & Yılmaz, K. (2018, November). Living under social care: The role of caregiver social support, temperament and living conditions in predicting well-being through middle-childhood. Paper presented at 20th National Psychology Congress, Ankara – Turkey.

Güneş, S., Gönül, B., & Işık, H. (2018, September). Family climate predicts Turkish youth's volunteering through parental socialization: A mediated-moderation model of social conscience. Poster presented at 16th EARA Biennial Conference, Ghent – Belgium.

Güneş, S., Memişoğlu-Sanlı, A., Erel-Gözağaç, S., & Berument, S. K. (2018, September). Well-being among children under social service care: Preliminary analyses for the interplay of social support and temperament. Paper presented at 16th EARA Biennial Conference, Ghent – Belgium.

Güneş, S., Memişoğlu-Sanlı, A., Erel-Gözağaç, S., & Berument, S. K. (2018, May). Cognitive self-regulation as a success factor: Predictors of cognitive self-regulation among children under social service care and their peers living in biological families. Paper presented at 5th International Euroasian Educational Research Congress, Antalya – Turkey.

Gönül, B., **Güneş, S**., & Işık-Baş, H. (2017, August). Predicting civic participation among Turkish emerging adults: roles of demographics and perceptions. Poster presented at 18th European Conference on Developmental Psychology, Utrecht, Netherlands.

Okur, Ş., Berument, S. K., & **Güneş, S.** (2017, March). Developmental delay of children in care: Turkish Care Types Study. Poster presented at Biennial Meeting of Society in Research for Child Development, in April 6 - 8, 2017, Austin, TX.

Güneş, S. & Gönül, B. (2017, March). Civic participation in turkey: today's actions, future's ıntentions. Poster presented at Biennial Meeting of Society in Research for Child Development, in April 6 - 8, 2017, Austin, TX.

Güneş, S., Gönül, B., & Işık, H. (2016, September). Interplay of parental socialization, and identification with parents on volunteering. Paper presented at 15th EARA Biennial Conference, Chiclana de la Frontera, Cadiz – Spain.

Güneş, S. & Berument, S. K. (2016, September). Adolescents' Engagement in Daily Household Tasks: Role of Individual and Familial Characteristics. Paper presented at 15th EARA Biennial Conference, Chiclana de la Frontera, Cadiz – Spain.

Akkaya, S., Berument, S.K., **Güneş, S.,** & Okur, Ş. (2016, September). General development of preschool children under state care. Paper presented at the 19th National Congress of Psychology, İzmir – Turkey. (in Turkish)

Güneş, S. & Berument, S. K. (2016, September). Taking a deeper look at mother – adolescent conflict on self-care, room management, and chores. Paper presented at the 19th National Congress of Psychology, İzmir – Turkey. (in Turkish)

Güneş, S. & Berument, S. K. (2015, September). Possible predictors of self-care among adolescents. Paper presented at 17th European Conference on Developmental Psychology, Braga, Portugal.

Güneş, S. & Berument, S. K. (2015, March). Predictors of conflicts on self-care, room management, and chores among mother – adolescent dyads. Poster presented at Biennial Meeting of Society in Research for Child Development, Philadelphia, PA.

Güneş, S. & Sahin-Acar, B. (2014, September). The effects of autobiographical memory functions, self-esteem and well-being on memory characteristics of Turkish college students. Poster presented at 14th EARA Biennial Conference, İzmir, Turkey.

Güneş, S. Bozo, Ö., Bağcı, E., & Güleç, M. (2013, July). The effects of personality and coping styles on the QoL of chronic urticaria patients. Poster presented at 13th European Congress of Psychology, Stockholm, Sweden.

***Translated Book Chapters**

Güneş, S. (2015). Lev Semionovich Vygotsky. In Turkish version of *Key Thinkers in Psychology* (pp. 41-50). Author: Rom Harré, Translation Editor: H. Harlak.

Harlak, H., & **Güneş, S.** (2015). Jean Piaget. In Turkish version of *Key Thinkers in Psychology* (pp. 51-64). Author: Rom Harré, Translation Editor: H. Harlak.

AWARDS & SCHOLARSHIPS

- 2020/02-2021/03: German Academic Exchange Service (DAAD), Research Visit Scholarship for Doctoral Researchers, Developmental Psychology Lab of Prof. Dr. Peter Zimmermann, University of Wuppertal – Germany
- 2018/09: International Conference Presentation Support, 2224-A, 2018/3, The Scientific and Technological Research Council of Turkey (TÜBİTAK)
- 2018/07-2018/08t: German Academic Exchange Service (DAAD) Scholarship for Intensive Language Course in Carl Duisberg Centrum, Cologne – Germany
- 2017 October – 2019 October: Monthly Merit-based Doctoral Scholarship from The Scientific and Technological Research Council of Turkey (TÜBİTAK).
- 2013 – 2020: Turkish Higher Education Committee monetary support for scientific meeting participations and stationary expenses for university research assistants (ÖYP)
- 2010 – 2011: Monthly Merit-based Scholarship from Turkish Telephone Company
- 2010 Spring: Scholarship for Erasmus Exchange Program
- 2006 – 2011: Monthly Merit-based Scholarship from Turkish Prime Ministry for Ranking in top 100 Students in University Entrance Exam
- 2006: Ranking 59th Student in Turkey in National University Entrance Exam (0.03 Percentile)

GENERAL & STATISTICAL PROGRAMS

MS Office Programs, SPSS, AMOS.

LANGUAGES

Turkish: Mother tongue

English: C1

German:B2

S. TURKISH SUMMARY/TÜRKÇE ÖZET

1.Giriş

Yaşamın ilk yıllarından itibaren bireyler, hayatlarını kendi başlarına nasıl sürdüreceklerini ve kendileri için neyin ve nasıl iyi olduğunu öğrenmeye çalışırlar. Ergenlik dönemi, yaşam süresi boyunca bireylerin hızla büyüdüğü, ruh ve beden sağlığında değişiklikler yaşadığı bir yaşam dönemidir (Steinberg, 2004). Ergenler, kendi özerklik ihtiyaçlarını ve ebeveynlerinin isteklerini dengelerken, ruhsal ve fiziksel sağlıklarını koruma ve geliştirme hakkındaki repertuvarlarını geliştirmek adına daha fazla deneyim elde ederler ve daha fazla davranış öğrenirler. Ergenlik döneminde hem ruhsal hem de fiziksel sağlığın öncüllerini araştıran bilimsel araştırmalar, güçlü sosyal bağların hem zihinsel hem de fiziksel sağlığın yalnızca enine kesitsel olarak değil, aynı zamanda boylamsal olarak da tahmin edilmesinde önemli bir rol oynadığını göstermiştir (Barger, Donoho ve Wayment, 2009; Cohen, 2004; Umberson ve Karan Montez, 2010). Sosyal bağların ruh ve beden sağlığı üzerindeki etkileri, bireyin dünyaya geldiği andan itibaren başlar, çocukluk ve ergenlikte devam eder ve daha iyi ya da daha kötü sonuçlar için yaşam boyu etkisini sürdürür. Ebeveynlerle ilişkiler, etkileri yaşam boyu sürdüğü için sosyal ilişkiler arasında özel bir öneme sahiptir (Arredondo ve diğerleri, 2006; Perry, Story ve Lytle, 1997).

Mevcut çalışma kapsamında iyi oluş, ruh sağlığı için bir gösterge olarak kabul edilmekteyken; sağlığı geliştirici davranışlar ise, fiziksel sağlık öncüllerinin bir temsilcisi olacak şekilde bir ise vuruk tanımlama tercih edilmiştir. Daha geniş bir perspektiften bakıldığında, mevcut çalışma üç ana araştırma sorusunu keşfetmeyi amaçlamıştır: i) Ergenler arasında algılanan olumlu ebeveynlik ve ebeveyne bağlanma güvenliği arasındaki ilişki boylamsal olarak nasıl bir desen göstermektedir? ii) Olumsuz duygulanım, algılanan olumlu ebeveynlik ile ebeveyne bağlanma güvenliği arasındaki ilişkisinde düzenleyici bir role sahip midir? iii) Algılanan olumlu ebeveynlik ve ebeveyne bağlanma güvenliğinin, ergenlerin iyi oluşu ve sağlığı geliştirici davranışları için yordayıcı

rolleri var mıdır? Takip eden bölümlerde bu araştırma sorularına ilişkin alan yazın derlemeleri sunulmaktadır.

Mevcut Çalışma

Söz konusu alan yazında, ergenlik döneminin gelişimsel bir dönem olarak önemini vurgulamış, bireylerin hızlı fiziksel ve psikolojik değişimler yaşadıkları ve bunun da zihinsel ve fiziksel sağlıklarını ve bu gelişimsel alanlardaki davranışlarını etkilediği vurgulanmıştır (Steinberg, 2001). Ergenlik döneminde edinilen kronik zihinsel, ruhsal ya da fiziksel sağlık sorunları yaşam boyunca devam edebilir (Viner ve Macfarlane, 2005). Ergenlik döneminde sağlığı geliştirmeye dair bir perspektifi geliştirmek, ilgili davranış repertuvarları edinmek ve bu alışkanlıkları düzenli bir şekilde uygulamaya sokmak, sadece ergenlik döneminde değil, yaşam boyu sürdürmek hem bireysel hem de toplumsal iyi oluş için büyük önem arz etmektedir. (Krahn ve diğerleri, 2021; WHO, 2022b). Ergenlik döneminde edinilen sağlıklı yasam davranışlarının ömür boyu süreklilik gösterdiğine dair araştırmalar mevcuttur. Bu nedenle, ergenler arasında iyi oluş ve sağlığı geliştirici davranışların yordayıcıları ve sonuçları üzerine yapılan araştırmalar, yalnızca ergenlik döneminde değil, yaşam boyu gelişim açısından da büyük önem taşımaktadır (Hallal ve ark., 2006; Raj, Senjam ve Singh, 2013).

İyi oluş ve sağlığı geliştirici davranışların yordayıcılarını belirlemek, araştırmacıların mevcut fenomenleri daha iyi anlamalarını sağlayabilir, uygulamalı gelişim psikolojisi bilimini zenginleştirmek için önemli ipuçları verebilir. Yukarıda bahsedilen alan yazın taraması, bu iki yapının yordayıcılarının yaş ve cinsiyet gibi nesnel ve öz-yeterlik ve kişilik gibi öznel olabileceğini göstermiştir. Öznel yordayıcılar arasında zengin ve bilgilendirici nitelikte olan bireyin kendisine has yani "bireysel yordayıcılar" ile, bireylerin diğer insanlarla kurduğu ilişkilerin özelliklerini anlatan "kişilerarası yordayıcılar" arasında ayrım yapmak, bu yordayıcı kategorilerinin işlevlerini anlamak acısından önem arz etmektedir. Yapılan araştırmalar kişilerarası faktörlerin sağlığı geliştirici davranışlarda ve iyi oluşa dair kavramlarla bazen olumlu, bazen ise olumsuz yönde bağlantılı olduğunu göstermiştir (Cohen, 2004; Rew ve diğerleri, 2013; Skinner ve Zimmer-Gembeck, 2007). Daha önceki

gelişim evrelerinde olduğu gibi, ergenlik döneminde de anne ve babayla kurulan ilişkiler, öznel iyi oluşu (Huebner, Suldo ve Gilman, 2006; Seligman ve Csikszentmihalyi, 2000) ve sağlığı geliştirici davranışları (Rew ve ark., 2013) olumlu yönde yordamaktadır. Ergenler arasında algılanan olumlu ebeveynlik ve ebeveyne bağlanma güvenliğine ilişkin alan yazın, bu iki kavramın iyi oluş ve sağlığı geliştirici davranışları öngörmede benzer olumlu örüntüler gösterdiğini işaret etmektedir. Başka bir deyişle, anne ve babaları ile kurdukları ilişkileri daha olumlu, daha iyi nitelikte değerlendiren ergenler, daha yüksek düzeyde iyi oluş ve sağlığı geliştirici davranış puanlarına da sahip olmaya yatkınlık göstermektedirler. Yine de araştırmacının bildiği kadarıyla, ergenler arasında iyi oluşu ve sağlığı geliştirici davranışları yordamada algılanan olumlu ebeveynlik ve ebeveyne bağlanma güvenliğinin rollerini aynı anda ve boylamsal olarak araştıran çalışmalar alan yazında şimdiye kadar yer almamıştır. Var olan tekil boylamsal çalışmalar ise, batılı örneklemlere dayandığından, genelleme sorunu taşımaktadır. Bu nedenle, mevcut çalışma, ergenler arasında iyi oluş ve sağlığı geliştirici davranışlar alanları için algılanan olumlu ebeveynliğin ve ebeveyne bağlanma güvenliğinin yordayıcı rollerine, anne ve baba ile kurulan ilişkilerin farklarına odaklanılarak desenlendirilmiştir.

Mevcut çalışmada, iyi oluş, psikolojik ve öznel iyi oluş olmak üzere iki alt boyutlu olarak ele alınmıştır. Sağlıklı yasamı destekleyen, sağlık davranışları ise fiziksel aktivite, sağlık sorumluluğu, sağlıklı yeme davranışları ve stres yönetimi alt boyutlarıyla ele alınmıştır.

Alan yazında, ergenler arasında iyi oluş (Cai ve diğerleri, 2013; Ma ve Huebner, 2008) ve sağlığı geliştirici davranışları (Rew ve diğerleri, 2013) geniş perspektiften inceleyen boylamsal çalışmaların eksikliği de göze çarpmaktadır. Boylamsal çalışmalar, araştırmacıların bir kavramın ya da olgunun zaman içindeki değişikliklerini ve değişikliklerin yönünü (azalması ya da artması gibi) tespit etmesini sağlar. Boylamsal araştırma desenleri ile tasarlanmış araştırmalar ile, çalışma değişkenleri arasındaki ilişkilerin yönlülüğünü belirlemek mümkündür (Singer, Willett ve Willett, 2003). Koehn ve Kerns (2018), algılanan olumlu ebeveynlik ve bağlanma güvenliği arasındaki ilişkileri inceleyen çalışmaların meta analiz yöntemi ile işleme konulduğu derleme çalışmalarında,

algılanan ebeveynlik ve ebeveyne bağlanma güvenliğinin eş zamanlı ve boylamsal olarak, birbirleri için yordayıcı olarak kullanılmasını önermiştir. Koehn ve Kerns (2018) özellikler orta çocukluk ve ergenlik döneminde bu iki kavramın yönlülüğünü belirleyen çalışmaların azlığına dikkat çekmiş ve gelecekteki çalışmalara boylamsal desen kullanmalarını önermişlerdir. Boylamsal araştırma desenleri ile tasarlanmış araştırmalarla bu kavramların yönlülüğünü görmek daha net olacaktır. Bu nedenle, mevcut çalışma, ergenlerin iyi oluşu ve sağlığı geliştirici davranışları için algılanan olumlu ebeveynlik ve bağlanma güvenliğinin yordayıcı rollerini araştırmak için boylamsal bir araştırma deseni kullanmıştır.

Buna ek olarak, bir mizaç özelliğin olan, olumsuz duygulanımın algılanan olumlu ebeveynlik ve ebeveyne bağlanma güvenliği arasındaki ilişkiyi etkileyebileceği ve bunun sonucunda ergenlerin iyi oluşunu ve sağlığı geliştirici davranışlarını yordayabileceği de öne sürülmüştür (Belsky, 1984; Koehn & Kerns, 2018). Bu nedenle, sırasıyla anneler ve babalar için sonuçları tahmin etmede algılanan olumlu ebeveynlik, olumsuz duygulanım ve bağlanma güvenliğinin etkileşimini araştırmak için ılımlı aracılık modelleri de kullanılmıştır.

Yukarıda bahsedilen alan yazın ışığında, mevcut çalışma üç ana araştırma sorusunu keşfetmeyi amaçlamıştır: i) Ergenler arasında, algılanan olumlu ebeveynlik ve ebeveyn bağlanma güvenliği algısı boylamsal olarak birbirleriyle nasıl ilişkilidir? ii) Olumsuz duygulanım, algılanan olumlu ebeveynlik ve ebeveyne bağlanma güvenliği ilişkisi üzerinde düzenleyici (moderator) bir role sahip mi? iii) Algılanan olumlu ebeveynlik ve ebeveyne bağlanma güvenliğinin, ergenlerin iyi oluş ve sağlığı geliştirici davranışları puanları için yordayıcı rolleri var mı? Aşağıdaki hipotezler, sırasıyla anne ve baba ile ilgili yordayıcılarla altı sonuç değişkeni (psikolojik iyi oluş puanı, öznel iyi oluş puanı, fiziksel aktivite puanı, sağlık sorumluluğu puanı, sağlıklı yeme davranışları puanı ve stres yönetimi puanı) için test edilmiştir.

*Hipotez-1.Süreklilik hipotezi: Algılanan olumlu ebeveynlik ve ebeveynlere bağlanma güvenliğinin sırasıyla anneler ve babalar için süreklilik göstereceği varsayılmıştır.

*Hipotez-2. Çapraz bağlanmış yollar (cross-lag) hipotezi: Anneler ve babalar için sırasıyla 1. Zamandan 2. Zamana ve 2. Zamandan 3. Zamana, algılanan olumlu ebeveynlik ve ebeveynlere bağlanma güvenliği arasındaki çapraz bağlanmış yolların arasındaki ilişkilerin olumlu yönde olacağı varsayılmıştır.

*Hipotez-3. Yordayıcı roller (predictive roles) hipotezi: Anne ve baba yordayıcılarla kurulacak istatistiki modeller için algılanan olumlu ebeveynlik ve ebeveyne bağlanma güvenliğinin, sonuç değişkenleri (psikolojik iyi oluş, öznel iyi oluş, fiziksel aktivite, sağlık sorumluluğu, sağlıklı yeme davranışları puanları ve stres yönetimi) ile olumlu yönde ilişkili olacağı varsayılmıştır.

*Hipotez-4. Düzenleyici rol (moderation) hipotezi: Anne ve baba yordayıcılarla kurulacak istatistiki modeller için, olumsuz duygulanımın, 1. Zamandaki algılanan olumlu ebeveynlik puanları ve 2. Zamandaki ebeveyne bağlanma güvenliği arasındaki ilişkide düzenleyici role sahip olması beklenmektedir. Başka bir deyişle, olumsuz duygulanım düzeyi yüksek olan ergenlerde algılanan olumlu ebeveynlik-ebeveyne bağlanma güvenlik bağının daha zayıf olması beklenmektedir.

*Hipotez-5. Düzenleyicili aracı (moderated mediation) hipotezi: Ek olarak, keşifsel bir düzenleyicili aracı modeli önerildi. 4. Hipotezde anlatılan düzenleyici rol hipotezine ek olarak, 2. Zamandaki ebeveyne bağlama güvenliği puanlarının, 3. Zamandaki sonuç degişkenlerini yordayıp yordamayacağı araştırıldı. Diğer bir deyişle, 1. Zamandaki algılanan pozitif ebeveynlik puanını, 2. Zamandaki ebeveyne bağlanma güvenliğini öngörmesi ve bunun da 3. Zamandaki sonuç değişkenleri puanlarını öngörmesi beklenmektedir. Ek olarak, zaman 1. Ve 2. Zamandaki degişkenler arasında, olumsuz duygulanım puanlarının düzenleyici role sahip olması da beklenmektedir.

Ergenlerin cinsiyeti ve yaşının araştırma değişkenleri üzerinde etkili olduğu gösterildiğinden (Balluerka ve ark., 2016; Meeus, Iedema, Maassen ve Engels, 2005), bu degişkenler mevcut çalışmada kontrol değişkeni olarak istatistiki analizlere dahil edilmiştir.

2. Yöntem

Katılımcılar

1.Zamanda (T1) için 648 ergen ve anneleri çalışmaya katılmıştır. Ergenler 5, 6, 7, 9, 10 ve 11. sınıflardandır. Lise veya üniversiteye giriş sınavlarının stresi altında olacakları için 8. ve 12. sınıf öğrencileri araştırmaya dahil edilmemiştir. Dört yüz dokuz ergen kız (%63,1) ve 239'u erkek (%36,9) idi. Ergenlerin yaşları 9,62 ile 17,87 arasında değişmektedir (Ort. = 13,37, SD = 2,34). Annelerin yaşları 27 ile 55 arasında değişmektedir (Ort. = 40.88, SS = 5.26). Anne ve babanın eğitim durumu, işi, medeni durumu ve aile gelirine ilişkin bilgiler Tablo 1'de özetlenmiştir.

T1'den altı ay sonra aynı okullardaki aynı öğrencilerle iletişime geçildi. İkinci veri toplama süresinde (T2) 561 öğrenci (orijinal örneklemin %87'si) ve 401 anne (orijinal örneklemin %62'si) anketleri doldurmuştur. T2'den altı ay sonra yine aynı okullardaki aynı öğrencilerle iletişime geçildi. Üçüncü veri toplamada (Ö3) 316 öğrenci (orijinal örneklemin %49'u) ve 229 anne (orijinal örneklemin %35'i) anketleri doldurmuştur.

Ölcüm Araclari

Mevcut çalışma için sonuç değişkenleri iki ana tema altında toplanmıştır; sağlık davranışları (sağlık sorumluluğu, sağlıklı yeme davranışları puanları, fiziksel aktivite ve stres yönetimi) ve iyi oluş (psikolojik iyi oluş ve öznel iyi oluş). Bağımsız değişken, sırasıyla anne ve babalar için özerklik desteği, yanıt verme duyarlılığı (responsiveness) ve olumlu ebeveynlik ortalamaları olarak hesaplanan genel olumlu ebeveynlik algısıdır. Aracı değişken sırasıyla anne ve babalar için ebeveyne bağlanma güvenliğidir. Olumsuz duygulanım ise, düzenleyici (moderator) degişken olarak mevcut çalışmaya dahil edilmiştir. Anneler demografik bilgi formu ve olumsuz duygulanım ölçeğini doldururken, diğer tüm ölçekleri ergenler doldurmuştur. Çalışmada kullanılan tüm ölçeklerin ortalamaları, standart sapmaları ve iç tutarlılık puanları Tablo 2'de özetlenmiştir.

İşlem

Orta Doğu Teknik Üniversitesi Etik Kurulu'ndan etik onay alınmıştır. Etik izin alındıktan sonra (bkz. Ek P) Millî Eğitim Bakanlığı Ankara İl Milli Eğitim Müdürlüğüne başvuru yapılmıştır. Millî Eğitim Bakanlığı Ankara İl Milli

Eğitim Müdürlüğü izin verdikten sonra (bkz. Ek Q), araştırmacı okullarla iletişime geçerek çalışmanın sürecini ve boylamsal yapısını açıklamıştır. Katılımı artırmak, 1.,2. Ve 3. Zamandaki veri toplama çalışmalarının sonunda, her okulda belli bir oran gözetilerek, hediye çeki çekilisi yapılmıştır. Okul yöneticilerinin Müdürlerin katılmayı kabul ettiği okullarda, araştırmacı önce onam formlarını ve anketleri kapalı zarflar içinde öğrenciler aracılığıyla ebeveynlere gönderdi. Anneleri katılmayı kabul eden öğrenciler için okul müdürü ve/veya okul psikolojik rehberlik servisi ile veri toplama saatleri ayarlanmıştır. Öğrenciler anketleri yaklaşık bir ders saatinde doldurmuştur. Lisans öğrencileri, verilerin toplanması sırasında ihtiyaç duyulduğunda maddelerin açıklığa kavuşturulmasına yardımcı olmuştur. İkinci ve üçüncü dalgalar için müdürler ve/veya okul rehberlik servisleri ile veri toplama süreleri düzenlenmiştir. İlk dalga 2018 Ekim-Kasım ayları arasında, ikinci dalga Nisan ve Mayıs 2019 arasında, üçüncü dalga ise Ekim ve Kasım 2019 arasında gerçekleştirilmiştir. Her veri toplama dalgasının sonunda hediye kuponları için çekilişler yapıldı.

3. Bulgular

Veri İşleme Basamakları

Her sonuç değişkeni (psikolojik iyi oluş, öznel iyi oluş, fiziksel aktiviteler, sağlık sorumluluğu, sağlıklı yeme davranışları puanları ve stres yönetimi) için sonuçlar aşağıdaki sırayla rapor edildi: i) üç veri toplama zamanındaki sonuç değişkeni puanları ve yordayıcılar arasındaki korelasyonlar, ii) anneyle ilgili yordayıcılarla çapraz bağlanmış yolların arasındaki ilişkilerin analizleri, iii) babayla ilgili yordayıcılarla çapraz bağlanmış yolların arasındaki ilişkilerin analizleri, iv) anneyle ilgili yordayıcılarla boylamsal aracılı düzenleyicili model analizi ve v) babayla ilgili yordayıcılarla boylamsal aracılı düzenleyicili model analizi.

Korelasyonlar ve düzenleyicili aracılı analizler SPSS 27 ile yapılmıştır. Önem düzeltmeli %95 güven aralıkları (n = 10000) ile “PROCESS” Makrosu, Model 7, v.3.5.3 (Hayes, 2021) anlamlılığı test etmek için kullanılmıştır. Düzenleyicili aracılı modelleri Hayes'in Model 7’ si ile test edilmiştir. Bu modeller, araştırmacıların aynı anda i) yordayicinin (predictor) arabulucu (mediatör) üzerindeki rolünü (a yolu üzerinde) ve sırayla, ii) arabulucunun

sonuçla (b yolu) ilişkili olup olmadığını, ek olarak da a yolu üzerindeki olası bir düzenleyici (moderator) rolü test etmelerini sağlar. Düzenleyicili aracılı modeller, her sonuç için anne ve baba ile ilgili yordayıcılarla tekrarlandı. Düzenleyicili aracılı analizlerinde, yordayıcı değişken, Zaman1'de ölçülen ebeveynlik algısıydı ve aracı, Zaman2'deki ebeveyne bağlanma güvenliği idi. Sonuç degişkenleri ise 3. Zamandan alınan (psikolojik iyi oluş, öznel, iyi oluş, fiziksel aktivite, sağlık sorumluluğu, sağlıklı yeme davranışları puanları ve stres yönetimi) puanlar idi. Ek olarak, 1. Zamandaki algılanan olumlu ebeveynlik ve 2. Zamandaki ebeveyne bağlanma güvenliği arasındaki ilişkide olumsuz duygunun (Anne raporu olarak Zaman 1'de ölçülen) düzenleyici rolü test edilmiştir.

Çapraz bağlanmış yolların (cross-lag) analizleri AMOS 23 ile gerçekleştirilmiştir. Çapraz bağlanmış yolların analizlerin model uyumunu değerlendirmek için aşağıdaki endekslerden yararlanılmıştır: $\chi 2/df$, CFI (Karşılaştırmalı Uyum İndeksi), NFI (Normlanmış Uyum İndeksi) ve RMSEA (Yaklaşımın Ortalama Kare Hatası) artı ve eksi %90 güven aralığı (CI). $\chi 2$ örneklem büyüklüğüne bağlı olduğundan, Bentler (1989) bunu ortadan kaldırmak için, model uyumunu değerlendirmek için $\chi 2/df$'nin 5.00'den küçük olduğu değerlerinin dikkate alınmasını önermiştir. .08'den küçük olan RMSEA değerleri istatistiki acıdan kabul edilebilir olarak düşünülürken, .95'in üzerindeki NFI ve CFI değerleri iyi bir uyuma işaret etmektedir (Browne ve Cudeck 1993; Schreiber, Nora, Stage, Barlow ve King, 2006).

Bulguların Özeti

** Hipotez 1, süreklilik hipotezi, sırasıyla anne ve babalar için algılanan olumlu ebeveynlik ve bağlanma güvenliği için desteklenmiştir.*

**Hipotez 2, Çapraz bağlanmış yollar (cross-lag) hipotezi kısmen desteklenmiştir.*

T1'deki algılanan olumlu ebeveynlikten T2'deki bağlanma güvenliğine giden yollar, T1'de bağlanma güvenliğinden T2'deki algılanan olumlu ebeveynlik puanlarına giden yollar hem anne hem de baba degişkenleriyle yapılan analizler için anlamlı ve olumlu ilişkiler göstermiştir.

T2'deki algılanan olumlu ebeveynlik puanlarından T3'teki bağlanma güvenliğine giden yollar da hem anne hem de baba degişkenleriyle yapılan analizler için anlamlı ve olumlu ilişkiler göstermiştir. Ancak, T2'deki bağlanma güvenliğinden T3'te olumlu ebeveynlik puanlarına giden yollar ne anneler ne de babalar için anlamlı sonuçlar göstermedi.

**Hipotez 3, yordayıcı roller hipotezi kısmen desteklenmiştir.*

1. Sonuç Degişkeni- Psikolojik İyi Oluş: 1. Zamandaki psikolojik iyi oluş puanları, hem anne, hem de baba değişkenli modellerde, 1. Zamandaki algılanan olumlu ebeveynlik puanları ve ebeveyne güvenli bağlanma puanları tarafından anlamlı ve olumlu bir şekilde yordamıştır. Hem anne, hem de baba degişkenlerinin dahil edildiği ayrı modellerde, T1'deki algılanan olumlu ebeveynlik puanları ile T2'deki psikolojik iyi oluş puanları arasındaki çapraz bağlanmış yolların arasındaki ilişkiler anlamlı ve olumlu yönde ilişki göstermiştir. Sadece anne değişkenli modelde, T1'deki ebeveyne güvenli bağlanma puanları ile T2'deki psikolojik iyi oluş puanları arasındaki çapraz bağlanmış yolların arasındaki ilişkiler anlamlı ve olumlu yönde ilişki göstermiştir. Anne ve baba modellerinden diğer tüm çapraz bağlanmış yolların arasındaki ilişkiler anlamlı değildir. T3'teki psikolojik iyi oluş için, T2'deki ne anne ne de baba ile ilgili yordayıcıların anlamlı yordayıcı rolleri yoktu.

2. Sonuç Degişkeni- Öznel İyi Oluş: T1'deki öznel iyi oluş puanları, yine T1'deki anne ve baba ilgili değişkenleriyle anlamlı ve olumlu yönde ilişkilenmiştir. T2'de öznel iyi oluş, yalnızca T1'de annenin olumlu ebeveynliği tarafından yordanmıştır. T2'den T3'e giden çapraz bağlanmış yolların arasındaki ilişkiler ne anne ne de baba ile ilgili değişkenlerin test edildiği modellerde, T3'teki öznel iyi oluş puanları ile istatistiki olarak anlamlı bir şekilde ilişkili değildi.

3. Sonuç Degişkeni- Fiziksel aktivite: T1'deki fiziksel aktivite puanları, T1'de anne ve baba ile ilgili değişkenlerle anlamlı ve pozitif olarak ilişkiliydi. T1'deki ne anne ne de baba ile ilgili değişkenler, T2'deki fiziksel aktivite puanları ile ilişkili değildi. T3'teki fiziksel aktivite puanları için, T2'deki ne anne ne de baba ile ilgili değişkenlerin anlamlı yordayıcı rolleri yoktu.

4. Sonuç Degişkeni- Sağlık sorumluluğu: T1'deki sağlık sorumluluğu puanları, T1'deki anne ve baba ile ilgili değişkenlerle anlamlı ve pozitif olarak ilişkiliydi. T1'deki ne anne ne de baba ile ilgili değişkenler, T2'deki sağlık sorumluluğu puanları ile ilişkili değildi. T3'teki sağlık sorumluluğu puanları için, T2'deki ne anne ne de baba ile ilgili değişkenlerin anlamlı yordayıcı rolleri yoktu.

5. Sonuç Degişkeni- Sağlıklı beslenme: T1'deki anne ve babayla ilgili değişkenler yine T1'deki sağlıklı beslenme puanı ile pozitif yönde anlamlı bicimde ilişkilenmiştir. Anne ve baba degişkenlerinin ayrı ayrı test edildiği modellerde, sadece T1'deki anneden algılanan olumlu ebeveynlik ile T2'deki sağlıklı yeme davranışları puanları arasındaki çapraz bağlanmış yol ilişkisi anlamlı ve olumlu yöndedir. T2'deki degişkenler ile T3'teki sağlıklı yeme davranışları puanları arasındaki çapraz bağlanmış yol ilişkilerinin hiçbiri istatistiki olarak anlamlı değildi.

6. Sonuç Degişkeni- Stres yönetimi: T1'deki stres yönetimi puanları, yine T1'deki anne ve baba ile değişkenleriyle ayrı ayrı yapılan analizlerde, algılanan olumlu ebeveynlik ve ebeveyne güvenli bağlanma puanları tarafından olumlu yönde yordamıştır. T2'deki stres yönetimi puanları, yalnızca T1'de annenin olumlu ebeveynliği tarafından yordamıştır. T2'deki ne anne ne de baba ile ilgili değişkenler, T3'teki stres yönetimi puanları ile istatistiki olarak anlamlı derecede ilişkili değildi.

**Hipotez 4, düzenleyici rol hipotezi desteklenmemiştir.* Diğer bir deyişle, olumsuz duygulanım puanları, sırasıyla anneler ve babalar için T1'deki olumlu ebeveynlik ile T2'deki bağlanma güvenliği arasındaki ilişki için düzenleyici (moderator) role sahip değildi.

*Hipotez 5, düzenleyicili aracılı rol hipotezi desteklenmemiştir. Ancak aracılı rol modelleri (mediation) kısmen desteklenmiştir.

1. Sonuç Degişkeni- (T3) Psikolojik İyi Oluş: T1'de algılanan olumlu ebeveynlik, T2'de bağlanma güvenliği ile pozitif olarak ilişkiliydi. T2'deki ebeveyne güvenli bağlanma puanları T3'teki psikolojik iyi oluş puanları ile olumlu yönde istatistiki olarak anlamlı şekilde ilişkiliydi. Bu açıklamadaki kısmi

aracılı (partial mediation) ilişkiler hem anne hem de baba degişkenleriyle ayrı ayrı yapılan analizlerde gözlenmiştir.

2. Sonuç Degişkeni- (T3) Öznel İyi Oluş: T1'de algılanan olumlu ebeveynlik, T2'de bağlanma güvenliği ile pozitif olarak ilişkiliydi. T2'deki ebeveyne güvenli bağlanma puanları ise T3'teki öznel iyi oluş puanları ile anlamlı ve olumlu yönde şekilde, anne (tam aracılı model – full mediation) ve baba (partial mediation – kismi aracılı model) modellerinde ilişkiliydi.

3. Sonuç Degişkeni- (T3) Fiziksel aktivite: T3'teki fiziksel aktivite puanları için anne ve baba degişkenleriyle yapılan aracılı degişken modelleri istatistiki analizlerce anlamlı olarak desteklenmedi.

4. Sonuç Degişkeni- (T3) Sağlık sorumluluğu: T3'te sağlık sorumluluğu puanlarına ilişkin anne ve baba ile ilgili değişkenler için aracılık yolları desteklenmedi.

5. Sonuç Degişkeni- (T3) Sağlıklı beslenme: T3'te sağlıklı yeme davranışları puanları ile ilgili olarak anne ve baba ile ilgili değişkenler için aracılık yolları desteklenmedi.

6. Sonuç Degişkeni- (T3) Stres yönetimi: T1'de annenin olumlu ebeveynliği, T2'de anneye bağlanma güvenliği ile anlamlı ve olumlu yönde ilişkiliydi, ancak T2'deki anneye bağlanma güvenliği T3'te stres yönetimi puanlarını yordamadı. T1'de babanın olumlu ebeveynliği, T2'de babaya bağlanma ile anlamlı bir şekilde ilişkiliydi ve bu da T3'te (Tam aracılık) stres yönetimi puanları ile ilişkiliydi.

4. Tartışma

Bu bölümde, her bir sonucun bulguları mevcut alan yazın e göre tartışılmaktadır. Bulguların tartışması, ergenler arasındaki iyi oluş ve sağlığı geliştirme davranışları ile ilgili olarak özetlenmiştir. Bölüm, mevcut çalışmanın güçlü yönleri ve çıkarımları ile devam etmektedir. Öneriler ileride yapılacak çalışmalar için sıralanmıştır. Bölüm, çıkarımlar ve sonuç ile sona ermektedir.

Bulguların Tartışılması

Mevcut çalışma üç ana araştırma sorusunu keşfetmeyi amaçlamıştır: i) Ergenler arasında, algılanan olumlu ebeveynlik ve ebeveyn bağlanma güvenliği algısı boylamsal olarak birbirleriyle nasıl ilişkilidir? ii) Olumsuz duygulanım,

algılanan olumlu ebeveynlik ve ebeveyne bağlanma güvenliği ilişkisi üzerinde düzenleyici (moderator) bir role sahip mi? iii) Algılanan olumlu ebeveynlik ve ebeveyne bağlanma güvenliğinin, ergenlerin iyi oluş ve sağlığı geliştirici davranışları puanları için yordayıcı rolleri var mı? Bu araştırma sorularıyla ilgili olarak beş hipotez formüle edilmiştir. Algılanan olumlu ebeveynlik, bağlanma güvenliği ve olumsuz duygulanım ile ilgili olarak, üç ana hipotez test edildi; süreklilik hipotezi (Hipotez 1), çapraz gecikme hipotezi (Hipotez 2) ve ılımlılık hipotezi (Hipotez 4). Sonuç değişkenleriyle ilgili olarak (psikolojik iyi oluş, öznel iyi oluş, fiziksel aktivite, sağlık sorumluluğu, sağlıklı beslenme ve stres yönetimi) iki ana hipotez araştırılmıştır, bunlar yordayıcı roller hipotezi (Hipotez 3) ve düzenleyicili aracılı model hipotezi (Hipotez 5). Takip eden bölümlerde, mevcut alan yazın ışığında hipotezler ve mevcut çalışmanın bulguları tartışılmıştır.

Algılanan olumlu ebeveynlik, Bağlanma Güvenliği ve Olumsuz Duygulanım Bulgularının Tartışılması

Mevcut çalışmanın ilk hipotezi olan "süreklilik hipotezi", algılanan olumlu ebeveynlik ve bağlanma güvenliğinin sırasıyla anneler ve babalar için süreklilik göstermesini bekliyordu. Bu hipotez çapraz bağlanmış yollar arasındaki ilişkiler analizleri ile test edilmiş ve sırasıyla anne ve baba ile ilgili değişkenler için desteklenmiştir. Başka bir deyişle, anne ve babaya yönelik bağlanma güvenliği, Türkiye örnekleminde 11-16 yaş arasındaki ergenler için üç zaman noktasında süreklilik göstermiştir. Bu bulgular, bağlanma güvenliğinin ergenlik boyunca süreklilik gösterdiğine ilişkin önceki görüşle uyumludur (Allen, McElhaney, Kuperminc ve Jodl, 2004; Buist, Reitz ve Dekovic, 2008; Koehn ve Kerns, 2018). Başka bir deyişle, bu çalışma, ergenler arasında bağlanma güvenliğinin süreklilik hipotezini destekleyerek uluslararası psikoloji alan yazınına katkıda bulunmuştur. Ergenlerin bağlanma gereksinimlerinin önceki gelişim dönemlerine göre fiziksel yakınlıktan duygusal yakınlığa geçiş gibi biçim değiştirdiği düşünülse de (Ruhl, Dolan ve Buhrmester, 2015), ebeveynlere bağlanma güvenliği önceki gelişimsel dönemlerde olduğu gibi, ergenlikte de önemini korumaya ve olumsuz deneyimler için koruyucu bir faktör olmaya devam etmektedir. Gelişimsel değişikliklerle birlikte iniş çıkışlar

yaşayan ergenler (Steinberg, 2004), sürekli bağlanma güvenliğindeki süreklilikten yararlanabilirler.

Bu çalışmanın bulguları boylamsal bir bakış açısı sağlayarak Türk ergen örneklemlerinde ebeveyn bağlanma alan yazınına da katkı sağlamıştır. Mevcut çalışmada, Kerns'in ilk çalışmalarındaki kavramlaştırması takip edilerek (Kerns, Aspelmeier, Gentzler ve Grabill, 2001; Kerns, Klepac ve Cole, 1996; Koehn ve Kerns, 2018; Sümer ve Anafarta-Şendağ, 2009) ebeveyne bağlanma güvenliği, tek faktör olarak çalışılmıştır. Güvenli bağlanma olgusunu ölçebilen ölçekler çeşitlendikçe, tek faktörlü ölçümlerden çok faktörlü ölçümlere geçiş yaşanmıştır (Brenning, Soenens, Braet, Bosmans, 2011; Koehn ve Kerns, 2018). Uluslararası alan yazındaki bağlanma güvenliğinin ölçülmesindeki bu gelişmelerin ardından, gelecekte yapılacak araştırmalar, Türk kültürel bağlamında, ergenlik dönemindeki bağlanma güvenliğinin farklı kavramsallaştırmalarıyla mevcut çalışmanın boylamsal bulgularını tekrarlayabilir (Kirimer, Akça ve Sümer, 2014; Sümer & Kağıtçıbaşı, 2010).

Mevcut çalışmanın sonuçları ayrıca, anneye bağlanma güvenliğine kıyasla, babaya bağlanma güvenliği puanlarının ortalamalarının üç zaman noktasında daha düşük olduğunu göstermiştir. Bu bulgular, bağlanma ilişkilerinde annelerin babalardan daha üst sıralarda yer aldığını vurgulayarak bağlanma hiyerarşisi bakış açısıyla uyumludur (Kobak, Abbott, Zisk ve Bounoua, 2017; Rosenthhal ve Kobak, 2010).

Mevcut çalışmanın bulguları, algılanan olumlu ebeveynlik için de süreklilik hipotezini destekledi. Başka bir deyişle, bağlanma güvenliğine ek olarak, algılanan olumlu ebeveynlik de sırasıyla anneler ve babalar için üç zaman noktasında süreklilik göstermiştir. Bu bulgular aynı zamanda, Pittsburg Gençlik Çalışması, Oregon Gençlik Çalışması, Singapur Miyop Risk Faktörleri Kohort Çalışması (SCORM) gibi farklı kültürlerde yapılan önceki boylamsal ebeveynlik çalışmaları ile de uyumludur. Bu bulgu, orta çocukluktan ergenliğe geçiş sırasında olumlu veya olumsuz ebeveyn-çocuk etkileşimlerinin göreceli istikrarı koruduğunu göstermektedir (Capaldi, Kerr ve Tiberio, 2018; Loeber ve diğerleri, 2001; Ong ve diğerleri, 2018).

Anneler ve babalar için sırasıyla 1. Zamandan 2. Zamana ve 2. Zamandan 3. Zamana kadar algılanan pozitif ebeveynlik ve bağlanma güvenliği arasında pozitif çapraz bağlı yol ilişkilerinin olması bekleniyordu. Bu hipotez sırasıyla anneler ve babalar için çapraz bağ analizleri ile test edilmiş ve kısmen desteklenmiştir.

Anneler için algılanan pozitif ebeveynlik, sırasıyla Zaman 1'den Zaman 2'ye ve Zaman 2'den Zaman 3'e kadar bağlanma güvenliğini yordamıştır. Zaman 1'deki bağlanma güvenliği aynı zamanda Zaman 2'de algılanan olumlu ebeveynliğin önemli bir pozitif yordayıcısıydı; yine de Zaman 2'deki bağlanma güvenliği, Zaman 3'teki algılanan olumlu ebeveynlik ile istatistiki olarak anlamli ölçüde ilişkili değildi. Ayrıca, Zaman 1'den Zaman 2'ye kadar, algılanan olumlu ebeveynlikten bağlanma güvenliğine olan ilişki, bağlanma güvenliğinden algılanan pozitif ebeveynliğe olan bağlantıdan daha güçlüydü.

Babalar için, bulgular benzer kalıplar gösterdi. Algılanan olumlu ebeveynlik, sırasıyla T1'den T2'ye ve T2'den T3'e bağlanma güvenliği ile pozitif ve anlamlı bir şekilde bağlantılıydı. T1'den T2'ye olan ilişki için, bağlanma güvenliğinden (T1) algılanan pozitif ebeveynliğe (T2) olan bağlantı, algılanan pozitif ebeveynliğe (T1) bağlanma güvenliğine (T2) olan bağlantıdan daha güçlüydü. Öte yandan, bağlanma güvenliği, algılanan olumlu ebeveynliği yalnızca T1'den T2'ye kadar öngördü, ancak T2'den T3'e değil.

Bu bulgular, algılanan pozitif ebeveynlik ve ebeveyne bağlanma güvenliğinin pozitif olarak ilişkili olduğuna dair önceki alan yazınla kısmen uyumludur (Koehn & Kerns, 2018). Koehn ve Kerns (2018) meta-analizlerinde bağlanma güvenliğinin – anneler için olumlu ebeveynlik ilişkilerinin, bağlanma güvenliği – babalar için olumlu ebeveynlik ilişkilerine kıyasla daha güçlü etki büyüklükleri sağladığını bildirmiştir. Mevcut çalışmanın önemli katkılarından biri, algılanan olumlu ebeveynlik ve bağlanma güvenliği arasındaki ilişkinin yönlülüğünün araştırılmasıydı. Mevcut çalışma, her iki kavramın birbiriyle ilişkili olmasına rağmen, algılanan ebeveynliğin sırasıyla anneler ve babalar için bağlanma güvenliğinin daha güçlü bir yordayıcısı olduğunu göstermiştir. Bu bulgular ergenlik bağlanma alan yazındaki boşluklardan birini doldurmuştur (Koehn ve Kerns, 2018).

T2'deki bağlanma güvenliği ile T3'teki algılanan olumlu ebeveynlik arasındaki ilişkiler, sırasıyla anne ve baba modelleri için istatistiki olarak anlamlı değildi. Bu bulgular T3'teki katılımcı kaybı oranına bağlı olabilir. Mevcut çalışma, T1'de 648 katılımcı ile başlamıştır. T2'de 561 katılımcı (orijinal örneklemin %87'si) anketleri doldurmuştur. T3 için araştırmacı, orijinal örneklemden 316 öğrenciye (orijinal örneklemin %49'u) ulaşabilmiştir. Araştırmacı, katılımı yüksek tutmak için hediye kuponları çekilişi teklif etmesine rağmen, örneklerim yarısından fazlası kaybedildi. Yapılan cross tab analizleri, T1'deki tüm örneklem (N = 648, %63.1 kadın, %36.9 erkek) ile tüm zaman noktalarında yanıt veren katılımcılar (N = 316, %63.9 kadın, 36,1) arasında orantılı cinsiyet farkı olmadığını göstermiştir.

Ayrıca, olumsuz duygulanımın, sırasıyla anneler ve babalar için Zaman 1'de algılanan olumlu ebeveynlik ve Zaman 2'de bağlanma güvenliği arasındaki ilişkiyi düzenlemesi bekleniyordu. Bu hipotez Hayes'in (2015; 2021) düzenleyicili aracılı modeli (Model No 7) ile test edilmiştir. Bu hipotez anne ve baba ile ilgili değişkenler için desteklenmemiştir. Belsky (1984), çocukların mizacının ebeveynlik-bağlanma güvenliği bağlantısı için açıklayıcı bir faktör olmasını beklerken, Koehn ve Kerns (2018) ergenlik için olumsuz duygulanımın bu bağlantıyı düzenlemek için mizaç özelliklerinden biri olan olumsuz duygulanımın uygun bir aday olabileceğini öne sürmüştür. Mevcut çalışmanın bulguları, olumsuz duygulanımın bu tür bir düzenleyici rolünü desteklemedi.

Beklenmemesine rağmen, bu bulgular önceki araştırmalarla benzer sonuçlar gösterdi. Groh ve ark., (2017) küçük çocuklarda mizaç- bağlanma güvenliği arasındaki ilişkiyi araştıran meta-analizlerinde mizaç- bağlanma ilişkilerinin gücünün zayıf olduğunu buldu. Olumsuz duygulanımın düzenleyici rolünün anlamsız çıkmasının bir nedeni de veri kaynağından kaynaklanabilir. Veri değişkenliğini artırmak için bu çalışmada anneler ergenlik cağındaki çocuklarının olumsuz duygulanım puanlarını değerlendirmiştir. Alan yazında, ebeveynin olumsuz duygulanım ölçümlerinin, ergenlerin olumsuz duygulanım raporlarıyla anlamlı olmayan bir şekilde ilişkili olduğu gösterilmiştir (Phillips, Lonigan, Driscoll ve Hooe, 2002). Anne ve ergen olumsuz duygulanım

raporlarının bu anlamlı olmayan ilişkisi, mevcut çalışmadaki anlamlı olmayan bulguları da açıklayabilir.

Ayrıca Lengua (2006), mizaç özelliklerindeki ve ebeveynlikteki değişikliklerin zaman içinde birbirini etkilediğini göstermiştir. Mevcut çalışmada, olumsuz duygulanım yalnızca bir kez ölçülmüştür ve bu, bağlanma güvenliğindeki değişiklikleri açıklamada olumsuz duygulanım – olumlu ebeveynlik etkileşimini sınırlayabilir.

Diğer bir açıklama ise, bu çalışmada ölçülen mizaç özelliğinin, yani olumsuz duygulanım içeriğiyle ilgili olabilir. Mizaçın tek bir boyutunu almak yerine, farklı mizaç özelliklerinin kombinasyonunun, çocuklar ve ergenler için güvenli bağlanma olgusunu (in) açıklamada daha güçlü bir yordayıcı rolü olduğu düşünülmüştür (Mangelsdorf ve Frosch, 1999).

Başka bir araştırma perspektifi, ebeveyn bağlanma güvenliğinin çocukların mizacının ve kişiliğinin habercisi olabileceğini öne sürdü. Bu nedenle, gelecekteki araştırmalar bağlanma – ebeveynlik – mizaç ilişkilerini boylamsal olarak da değerlendirebilir (Hagekull ve Bohlin, 2003). Ek olarak, ebeveynlerin ve ergenlerin kişilikleri (Schofield ve diğerleri, 2012) ve bağlanma işleme önyargıları (De Winter, Waters, Braet ve Bosmans; 2018) gibi faktörler de ergenlik döneminde, algılanan olumlu ebeveynlik ve ebeveyne güvenli bağlanma arasındaki ilişkiyi yordayabilir. Bu nedenle, gelecekteki çalışmaların yukarıda belirtilen değişkenleri de dahil ederek mevcut bulguları tekrarlaması önerilmektedir.

Ergenlik döneminde iyi oluş ve sağlığı geliştirme davranışları için yordayıcıların genel tartışması

Sonuç olarak, bu çalışma algılanan olumlu ebeveynlik, ebeveyne bağlanma güvenliği, olumsuz duygulanım, sağlığı teşvik edici davranışlar ve iyi oluş için yalnızca enine kesitsel değil aynı zamanda boylamsal bulgular sağlayarak ergenlik alan yazın üne katkıda bulunmuştur. İyi oluş bileşenleri, yani psikolojik iyi oluş ve öznel iyi oluş için, pozitif anne ebeveynliğin boylamsal yordayıcı rolü gözlenmiştir. Yordayıcıların geri kalanı, sırasıyla psikolojik ve öznel iyi oluş için önemli boylamsal ilişkiler sağlamadı. Sağlığın teşviki ve geliştirilmesi bileşenleri için, stres yönetimi dışında, yordayıcılardan (olumlu

algılanan olumlu ebeveynlik ve ebeveyn bağlanma güvenliği) sonuç değişkenlerine (fiziksel aktivite, sağlık sorumluluğu ve sağlıklı beslenme) kadar anlamlı boylamsal ilişkiler yoktu. İyi oluş değişkeninin bileşenlerinde de olduğu gibi, stres yönetimi için çapraz yol analizleri, T1'den T2'ye kadar algılanan anne pozitif ebeveynliğin önemli tahmin edici rolünü verdi. Bunun nedeni, stres yönetiminin ruh sağlığını geliştirme ile daha güçlü bir şekilde ilişkili olması olabilir (Folkman ve Lazarus, 1984).

Güçlü Yönler, Sınırlılıklar ve Öneriler

**Mevcut çalışmanın güçlü yönleri*

Ergenlik, fiziksel, zihinsel ve sosyal gelişim sonuçlarındaki hızlı değişikliklerle dikkat çektiği bir gelişim dönemidir (Steinberg, 2004). Ergenlik döneminde benimsenen (sağlıksız) alışkanlıklar, yaşam boyu sağlık ve morbiditeyi yordarken, ergenlik döneminde fiziksel ve zihinsel sağlığın desteklenmesi acısından büyük önem taşıyordu (Hallal ve diğerleri, 2006; Raj, Senjam ve Singh, 2013; Srof & Velsor-Friedrich, 2006). Bu çalışma, ebeveyn ilişkisi niteliklerine ilişkin iyi oluş ve sağlığı geliştirici davranışları araştırarak ergenlik alan yazınına katkıda bulunmuştur. Mevcut çalışmanın ilk ve en önemli güçlülüğü, boylamsal araştırma desenidir. Boylamsal bir çalışma olma kriterini karşılamak için, bir çalışmanın en az üç zaman noktasından veri içermesi gerektiği vurgulanmıştır (Singer, Willett ve Willett, 2003). Mevcut çalışma, çalışma değişkenleri arasındaki ilişkilerin araştırılması için üç zaman noktalı boylamsal verileri kullanmıştır. Boylamsal araştırmalar, araştırmacıların önceki çalışma değişkenlerini kontrol ederek öncüller ve gelişimsel sonuçlar arasındaki nedenselliği araştırmasını sağlar (Nurmi, 2004; Shek ve Ng, 2016). Mevcut çalışmanın bir diğer gücü de sırasıyla anne ve babalar için algılanan olumlu ebeveynlik, olumsuz duygulanım ve bağlanma güvenliğinin eş zamanlı olarak araştırılmasıdır. Alan yazın de bu üç yapının birbiriyle ilişkili olduğu öne sürülmüştür, ancak ilişkileri ergenlik dönemi için araştırılmamıştır. Mevcut çalışma, olumsuz duygulanımın bir düzenleyici olarak istatistiki olarak anlamlı olmayan bir role sahip olduğunu ortaya koydu ve bu tür anlamsız sonuçların olası mekanizmalarını tartıştı.

**Sınırlılıklar ve öneriler*

Mevcut çalışma güçlü noktaları kadar sınırlılıklara da sahiptir. Üç ana sınırlama genelleme sorunu, ölçüm seçimi ve katılımcı kaybı oranı olarak belirlenmiştir. Her biri sınırlılık alan yazınla ilgili olarak tartışılmış ve gelecek çalışmalar için önerilerde bulunulmuştur. Birinci sınırlılık genellenebilirliktir. Bu araştırma Türkiye'nin başkenti Ankara'da yapıldı. Katılan ailelerde annelerin %38'i üniversite ve üzeri diploma sahibidir. Bu oran, Türkiye'de 2021 yılında %7,6 olan kadınların genel nüfus yükseköğretim oranından (TÜİK, 2021) çok daha yüksektir. Anne eğitim düzeyi, kişinin sosyo-ekonomik statüsünün (SES) en güçlü yordayıcılarından biri olarak kabul edilmektedir (Hoff, Laursen ve Tardiff, 2002). Diğer bir deyişle, SES ile ilgili olarak, çalışma örnekleminin Türkiye'deki genel toplumdan farklı olması, bulguların genellenebilirliğini sorgulamaktadır. Çalışma örnekleri ile genel popülasyon arasındaki SES farkı, mevcut çalışmaya özgü değildi. Boylamsal çalışmalarda düşük SES'ten katılımcıların ulaşılması ve elde tutulmasının daha zor olduğu belgelenmiştir (Heinrichs, Bertram, Kuschel ve Hahlweg, 2005).

Alan yazındaki diğer boylamsal çalışmalar gibi (Heinrichs ve diğerleri, 2005; Shek ve Ng, 2016; Young, Powers ve Bell, 2006), katılımcı kaybı oranı mevcut çalışmanın temel bir sınırlamasıydı. Çalışma T1'de 648 ergenle başladı ve T3'te sadece 316 öğrenci vardı (orijinal örneğin %49'u). Her veri toplama sürecinin sonunda ergenler için 30 hediye kuponunun dağıtıldığı çekililer yapıldı. Yeterli finansmanla, gelecekteki çalışmalar sadece ergenler için değil, aileleri için de daha fazla hediye kuponu sunabilir. Katılımcıların yaşı (Young ve diğerleri, 2006) ve SES (Heinrichs ve diğerleri, 2005) alan yazındaki katılımcı kaybı oranları için olası açıklamalardı. Anne eğitim düzeyi, aile SES'in birincil göstergesi olarak mevcut çalışmada nispeten homojendi (Hoff ve diğerleri, 2002). Ancak ergenlerin yaşı, yıpranma oranını açıklamada açıklayıcı faktörlerden biri diğeri olabilir. Ergenlerin yaşs arttıkça, lise ve üniversite sınavlarına hazırlık faaliyetlerinden yararlanmak için özel okullara geçme olasılıkları daha yükselmektir. Gelecekteki çalışmalar, katılımcı kaybından kaçınmak için daha büyük bir örneklem büyüklüğü ile başlayabilir.

Ölçme araçlarının seçiminde de sınırlamalar vardır. Başlangıç olarak, olumsuz duygulanım, ergenlerin olumsuz duygulanımını yakalamakta başarısız olabilen anne raporlarıyla ölçülmüştür (Phillips, Lonigan, Driscoll ve Hooe, 2002; ayrıntılı açıklama için bkz. Bölüm 4.1.1). Bu nedenle, ergenlerde olumsuz duygulanımların ölçülmesi için gelecekte yapılacak araştırmalarda özbildirim ve gözlemin yer alması önerilmektedir. Mevcut çalışmanın fiziksel aktivite ile ilgili bir zayıflığı, öz bildirim ölçüm tekniğinden kaynaklanabilir. Ergenler arasında, öz bildirim ölçümleri, fiziksel aktivitelere gerçek katılımı yansıtma kapasitesinden yoksundu (Sirard & Pate, 2001). Gelecekteki çalışmaların, kalp atış hızı monitörleri veya hareket sensörleri gibi daha gerçek zamanlı ölçümlerden faydalanması önerilmektedir. Bu çalışmada bağlanma güvenliği tek faktör olarak ölçülmüştür. Alan yazın de, ergenlerin bağlanma güvenliğinin ölçülmesine ilişkin farklı bakış açıları vardır (Brenning, Soenens, Braet, Bosmans, 2011; Koehn ve Kerns, 2018) ve bağlanma güvenliğinin çeşitli faktörlerinin farklı gelişimsel sonuçlarla ilişkili olduğu bulunmuştur (Brenning, Soenens, Braet, Bosmans, 2011). Bosmans & Kerns, 2015; Sarıtaş-Atalar & Altan-Atalay, 2017). Bu nedenle, gelecekte yapılacak araştırmalarda, bağlanma güvenliğinin iyi oluş ve sağlığı geliştirici davranışlar üzerindeki yordayıcı rollerinin diğer bağlanma önlemleriyle birlikte araştırılması önerilmektedir.

**Etkiler ve Sonuçlar*

Algılanan olumlu ebeveynlik ve bağlanma güvenliği arasındaki yönlülük, ergenlik döneminde araştırılması gereken bir konuydu (Koehn ve Kerns, 2018). Algılanan olumlu ebeveynlik ve bağlanma güvenliği arasındaki çift yönlü ilişkiler, algılanan olumlu ebeveynlikten bağlanma güvenliğine olan ilişkilerin, sırasıyla anne ve babalar için bağlanma güvenliğinden algılanan ebeveynliğe giden yollardan daha sağlam olduğunu ortaya koydu.

İyi oluş ve sağlığı geliştirmeye dair bir perspektif, ergenlik döneminde geliştirilip hem ergenlikte, hem de yaşam boyu zihinsel ve fiziksel sağlık üzerinde hem eşzamanlı hem de uzun süreli etkileri olan iki önemli gelişimsel sonuçtur. Mevcut çalışmanın bulguları, algılanan olumlu ebeveynlik ve bağlanma güvenliğinin, ergenler için iyi oluş ve sağlığı geliştirici davranışlar için enine kesitsel yordayıcı güce sahip olduğunu göstermiştir. Ayrıca, baba

değişkenli modellerle karşılaştırıldığında, anne değişkenli modeller, iyi oluş ve sağlığı geliştirici davranışlar için daha yüksek sayıda anlamlı yordayıcılar vermiştir. Bu bulgular, anne ebeveynlik niteliklerinin, ergenlik döneminde iyi oluş ve sağlığın teşviki için hayati önem taşıdığını ima etmektedir. Ergenlik döneminde iyi oluş ve sağlığı geliştirici davranışları artırmayı hedefleyen müdahalelerin anneleri ve annelerle olan ilişki niteliklerini içermesi önerilmektedir.

Ayrıca baba değişkenli modellerde anlamlı olmayan çağrışımlar, Türk kültüründe ergen çocukların yetiştirilmesinde babaların rolleri hakkında soru işaretlerine yol açabilmektedir. Mevcut çalışmanın bulguları, ebeveyn ilişkisi niteliklerinin enine kesitsel rollere sahip olduğunu ima etti. Yine de, olası düzenleyicileri ve aracıları da göz önünde bulundurarak ebeveyn yapısının yordayıcı rollerini araştıran daha fazla çalışmaya ihtiyaç vardır.

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